AP - 117
PERMANENT PITS

2013 AGWMR

09 / 11 / 2013

CONESTOGA-ROVERS & ASSOCIATES

6121 Indian School Road, NE Suite 200
Albuquerque, NM, USA 87110
Telephone: (505) 884-0672 Fax: (505) 884-4932
http://www.craworld.com

September 11, 2013 Reference No. 075167

Mr. Glenn vonGonten
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Subject: 2013 Annual Groundwater Monitoring Report
Abatement Plan AP-117
ConocoPhillips Wingate Fractionating Plant
Gallup, New Mexico

Dear Mr. vonGonten,

Conestoga-Rovers & Associates is pleased to deliver the enclosed Annual Groundwater Monitoring Report per the requirements of the Abatement Plan AP-117. This report describes the activities and data associated with a groundwater monitoring event at the Wingate Fractionating Plant Evaporation Ponds. A report describing a similar event for the Wingate Fractionating Plant (not associated with the Evaporation Ponds) has been issued under separate cover (Ref. No. 075006).

Should you have any questions, please contact Jeff Walker at 505-884-0672.

Sincerely,

Jeff Walker
Project Manager/Geologist

Enclosures (1)

Cc: Janelle Vestal, ConocoPhillips
Sherry Timmerman, ConocoPhillips
Terry Lauck, ConocoPhillips (electronic only)

www.CRAworld.com

2013 Annual Groundwater and Pond Monitoring Report

Wingate Fractionator Plant
AP-117

Prepared for: ConocoPhillips Wingate Fractionator Plant

Conestoga-Rovers & Associates
6121 Indian School Road, NE Suite 200
Albuquerque, New Mexico 87110

September 2013 • #075167
Report Number:1

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1.0 INTRODUCTION AND SITE HISTORY

The Wingate Fractionator Plant (Site) is located in McKinley County, New Mexico, within portions of Sections 9, 10, 15, 16, and 17, Township 15 North, Range 17 West (**Figure 1**). A New Mexico Water Quality Control Commission (NMWQCC) Groundwater Discharge Permit for the Wingate Plant was first approved by the New Mexico Oil Conservation Division (NMOCD) on August 17, 1992. The NMOCD, in a letter dated April 2, 2012, determined that, in accordance with NMWQCC regulations, the Site no longer required a discharge permit. As a result, Discharge Permit GW-054 expired in August 2012. The NMOCD required the Wingate Fractionator Plant to continue its groundwater monitoring and remediation activities under Abatement Plan AP-117.

In accordance with Abatement Plan AP-117, Conestoga-Rovers & Associates (CRA) conducted an annual groundwater sampling event on June 25, 2013. This report presents results from this event.

2.0 SITE DESCRIPTION

The Site consists of a gas fractionator plant with associated pipelines, storage tanks, and evaporation ponds. The plant is surrounded by a chain-link fence, and the office is located on the west end of the facility. Two evaporation ponds are located to the northwest of the plant. These ponds are used and maintained by ConocoPhillips Company (ConocoPhillips) and are surrounded by a locked chain-link fence. All monitoring wells are on ConocoPhillips, or ConocoPhillips-leased property. A Site Plan is provided as **Figure 2**.

The Site lies along the south side of an east-west trending alluvial drainage formed by the south fork of the Puerco River. The Site is approximately 6,590 feet above mean sea level (amsl), and lies on Quaternary-aged alluvium. To the south of the plant are the Zuni Mountains, reaching a maximum elevation of approximately 9,000 feet amsl. To the north of the plant, a red sandstone escarpment rises 400 feet above the valley to an elevation of approximately 7,000 feet amsl. The escarpment is comprised of Jurassic-age sandstone and siltstone deposits of the Entrada Formation.

Groundwater at the Site has been encountered during drilling at approximately 20 feet below ground surface (bgs), rising to approximately 4 to 10 feet bgs in well casing across the Site, suggesting confined aquifer conditions. As evidenced by boring logs from monitoring well installations, the Site is underlain by approximately 20 feet of clay which may act as the confining layer. Beneath the clay layer, a saturated, fine grained sand is encountered which appears to be the water bearing zone. A historical boring log for WMR-1 is presented in **Appendix A**.

Two series of monitor wells are installed near the facility evaporation ponds. The first series of wells are shallow vadose zone monitor wells, MWS-1 and MWS-2. These two shallow wells are installed to a total depth of 15 feet below ground surface (bgs) and are screened from 5 to 15 feet bgs. The shallow vadose zone wells were installed to monitor potential evaporation pond seepage. MWS-1 and MWS-2 were dry at the time they were constructed and have been consistently dry during every sampling event since, indicating no pond seepage. The second series of monitor wells installed near the evaporation ponds, MWR-1, MW-2, and MW-3, are used to monitor groundwater conditions of the aquifer in the vicinity of the ponds.

This report discusses data collected from both series of monitor wells during the 2013 annual monitoring event and provides a comparison to historical data. **Table 1** lists well completion information and groundwater elevations. Historical groundwater flow direction at the site has been predominantly towards the northwest. Groundwater levels collected during the 2013 groundwater sampling event were consistent with previous data indicating a groundwater flow direction to the northwest. A groundwater potentiometric surface map is presented as **Figure 3**.

3.0 GROUNDWATER SAMPLING METHODOLOGY

CRA performed groundwater monitoring activities on June 25, 2013. An oil/water interface probe was used to measure groundwater depths and check for the presence of light non-aqueous phase liquids (LNAPL) in each of the Site monitoring wells. These data, along with casing diameter and total depth information, were used to calculate the water volume in each monitoring well. Before and after each use, the oil/water interface probe was cleaned with an Alconox®/de-ionized water solution, and then rinsed with de-ionized water.
Water was purged from the wells with a bladder pump until field parameters, including pH, oxidation reduction potential, dissolved oxygen, conductivity, and temperature stabilized and/or three well volumes of water were removed. Field parameters were monitored using a YSI 556 multi-parameter sonde, and were recorded on CRA Well Sampling Field Information forms, as presented in **Appendix B**.

Following purging, groundwater samples were placed into laboratory-prepared sample containers. Disposable nitrile gloves were worn by sampling personnel and were changed at each well location. The pump was cleaned following each well sampling by circulating Alconox® and de-ionized water solution, methanol and de-ionized water solution, and followed by a de-ionized water rinse.

Surface water samples were collected approximately 10 feet from the edge of Site evaporation ponds by dipping disposable polyethylene sampling cups attached to the end of an extendable rod. Water was then transferred from sampling cups to laboratory prepared containers.

Following collection of samples from each location, samples were immediately labeled, placed on ice, and submitted to Hall Environmental Analysis Laboratory, Inc. of Albuquerque, New Mexico for analyses of volatile organic compounds (VOC) including benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8260; semi-volatile organics by EPA Method 8270; chloride, sulfate, and nitrate by EPA Method 300.0A; dissolved metals including, arsenic, barium, cadmium, calcium, chromium, lead, selenium, silver, and sodium by EPA Method 6010; mercury by EPA method 7470; uranium-238 by EPA method 6020; total dissolved solids (TDS) by SM 2540C; pH by SM 4500H + B/9040; alkalinity by SM 2320B; Biological Oxygen Demand (BOD) by SM 5210B; Chemical Oxygen Demand (COD) by SM 5220D; and total coliform analyses by SM 9223B.

On November 10, 2011, verification of the metals sampling list was received in an email from Glen VonGonton of the NMOCD. As a result of this verification, uranium analysis was added and magnesium and manganese analysis was discontinued for all Site wells and evaporation ponds.

4.0 ANALYTICAL RESULTS

The 2013 groundwater analytical results have been summarized and are presented in **Table 2**. Analytical results for groundwater samples were compared to the NMWQCC groundwater quality standards contained in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Applicable groundwater quality standards are found in Subsection A, *Human Health Standards,* and Subsection B, *Other Standards for Domestic Water Supply*. Analytical results for evaporation pond water samples are presented in **Table 3**.

Graphs depicting selected analytical results versus time and Site hydrographs have been included as **Appendix C.** The laboratory analytical report, including the chain-of-custody, is presented in **Appendix D**. The Site map with analytical results for some of the commonly noted constituents of concern (COCs) that have historically occurred over the regulatory standards is included as **Figure 4**.

4.1 EVAPORATION POND PERIMETER MONITORING WELLS AND EVAPORATION POND WATER SAMPLES

Monitoring Wells

Monitor Wells, MWS-1 and MWS-2 were found to be dry during the 2013 groundwater monitoring event, consistent with historical groundwater level data. Thus, no water samples were collected from these wells and no seepage is apparent from Site evaporation ponds.

The groundwater samples from MWR-1, MW-2, and MW-3 did not contain BTEX above laboratory detection limits. Similarly, BOD was not found above laboratory detection limits in MWR-1, MW-2 and MW-3. Results for COD in MWR-1, MW-2 and MW-3 were comparable to historical results which have never exceeded the NMWQCC standard of 125 milligrams per liter (mg/L).

The original DP-045 limit for fecal coliform is 500/100 milliliters (mL), however, since 2007 the NMOCD has allowed analysis of total coliform in place of fecal coliform due to the remote location of the Site, the distance to the nearest analytical lab from the Site, and the short laboratory holding time for fecal coliform analysis. There are currently no NMWQCC standards in place for total coliform or *E.coli*. Samples collected from MWR-1, MW-2, and MW-3 were all below laboratory detection limits with results of less than one colony per 100 ml for total coliform.

Analytical results for groundwater samples from evaporation pond perimeter Monitor Wells, MWR-1 and MW-2, and from MW-3 did not exceeded applicable NMWQCC groundwater quality standards for any of the constituents of concern.

Evaporation Ponds

The East Evaporation Pond surface water sample had a COD result higher than historical results. BOD was consistent with historical data. Results for total coliform analysis indicate total coliform in a sample from the East Pond to be > 2419.6 colonies per 100 mL of water; however, results for *e.coli* indicate < 1 colony per 100 mL of water.

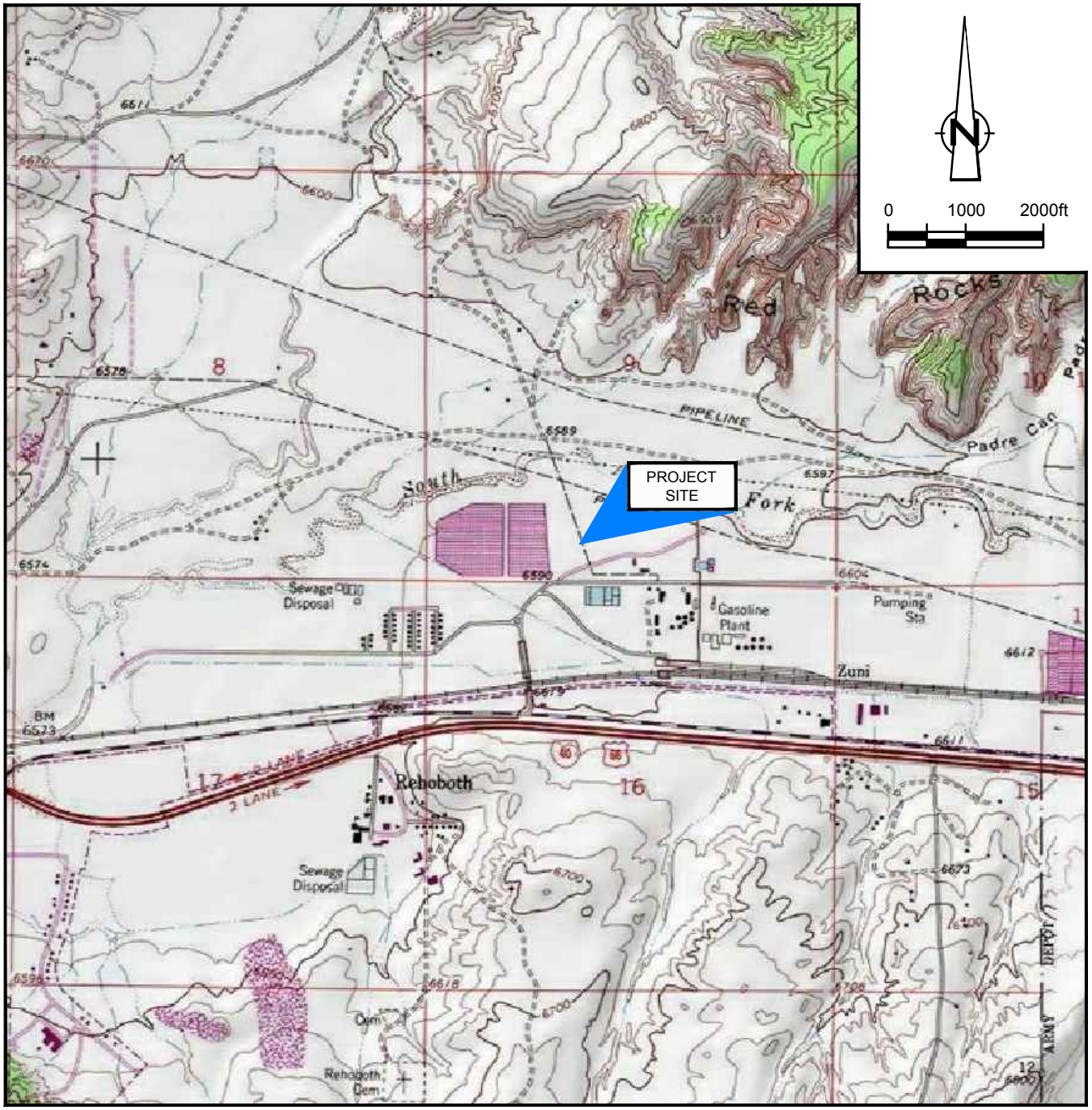
The West Evaporation Pond did not contain sufficient water during the June 2013 sampling event for sampling. Analytical results for water samples collected from the Wingate evaporation ponds can be found on **Table 2.**

5.0 SUMMARY AND RECOMMENDATIONS

Shallow vadose zone wells installed to detect potential seepage from the Site Evaporation Ponds continue to remain dry; indicating the clay liner beneath the ponds is intact. In addition, concentrations of TDS, sulfate, and chloride in groundwater Monitoring Wells, MWR-1 and MW-2, located down-gradient of the Evaporation Ponds, are consistent with those found in Site wells hydraulically up-gradient of the ponds. Concentrations of COCs in all down-gradient monitoring wells, including BTEX, are also below NMWQCC groundwater quality standards, consistent with historical data.

The next annual sampling and reporting event is scheduled for June of 2014.

FIGURES



SOURCE: USGS 7.5 MINUTE QUAD
"BIG ROCK HILL AND HARD GROUND FLATS, NEW MEXICO"

LAT/LONG: 35.5385° NORTH, 108.6484° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO WEST

Figure 1

SITE LOCATION MAP
WINGATE FRACTIONATOR PLANT
ANNUAL GROUNDWATER SAMPLING
GALLUP, NEW MEXICO
ConocoPhillips Company

RE: USGS Aerial Photograph.

LEGEND

- Monitor Well Location
- Re-Drill To Replace MW-1
- Plugged And Abandoned 6-24-03

Figure 2

SITE PLAN WITH AERIAL PHOTOGRAPH
WINGATE FRACTIONATOR PLANT
ANNUAL GROUNDWATER SAMPLING
GALLUP, NEW MEXICO
ConocoPhillips Company

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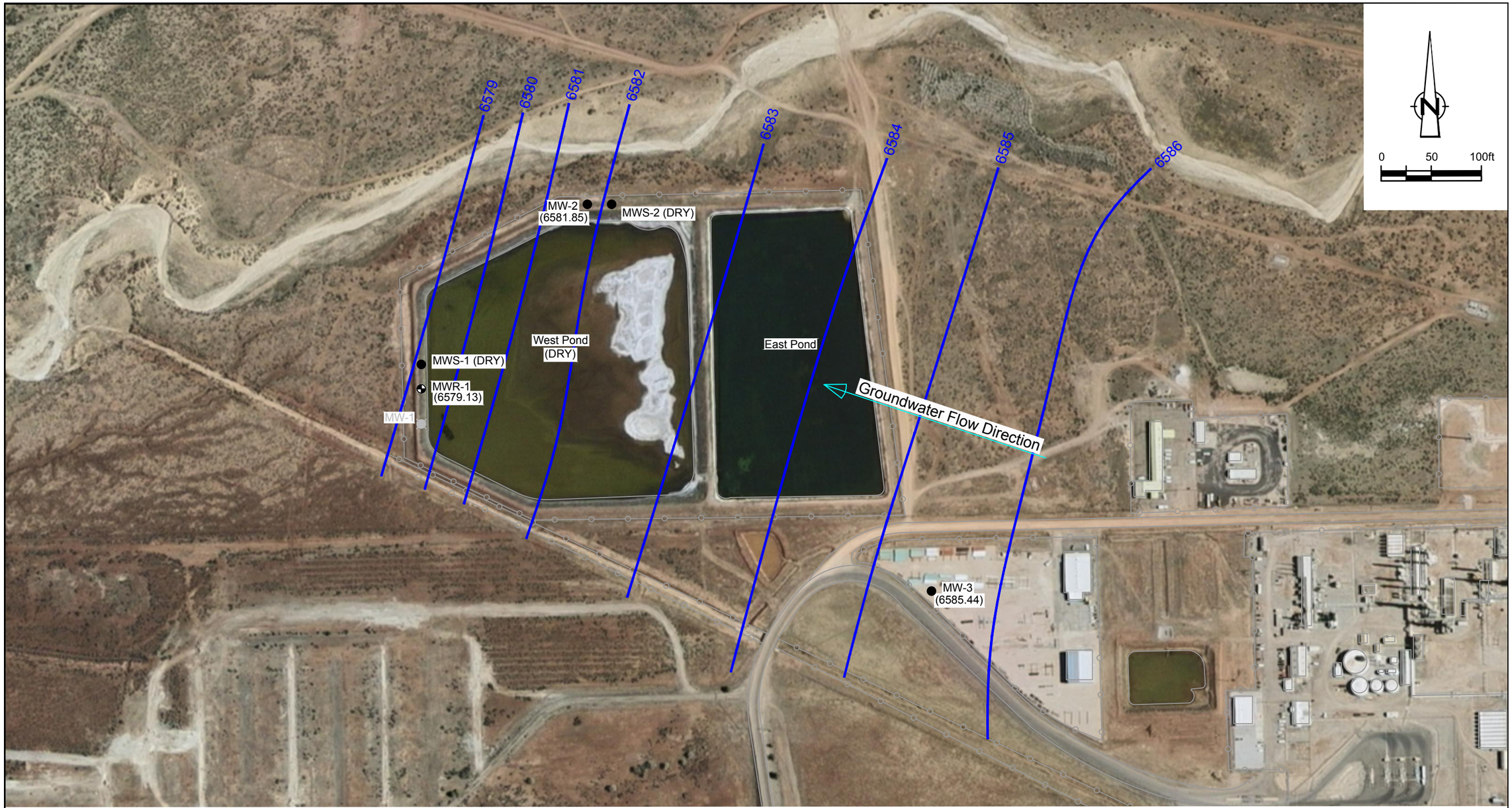

RE: USGS Aerial Photograph.

LEGEND

- MONITOR WELL
- RE-DRILL TO REPLACE MW-1
- PLUGGED AND ABANDONED SEPTEMBER 7, 2013
- (6586.79) GROUNDWATER ELEVATION, ft. AMSL
- 6587 GROUNDWATER ELEVATION CONTOUR, ft. AMSL
- GROUNDWATER FLOW DIRECTION

Figure 3

JUNE 2013 GROUNDWATER POTENTIOMETRIC SURFACE MAP
WINGATE FRACTIONATOR PLANT
ANNUAL GROUNDWATER SAMPLING
GALLUP, NEW MEXICO
ConocoPhillips Company

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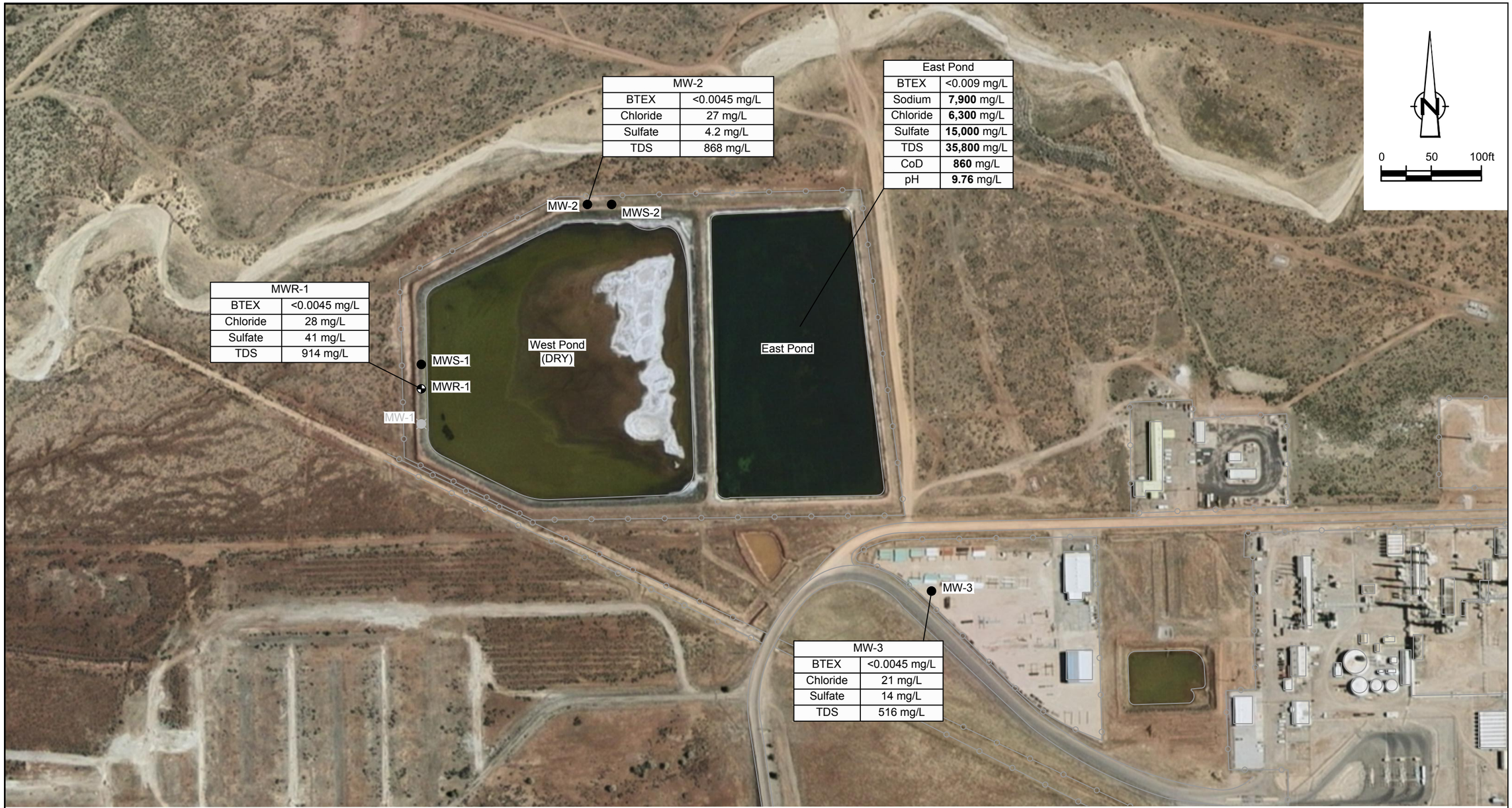

MW-2	
BTEX	<0.0045 mg/L
Chloride	27 mg/L
Sulfate	4.2 mg/L
TDS	868 mg/L

East Pond	
BTEX	<0.009 mg/L
Sodium	**7,900** mg/L
Chloride	**6,300** mg/L
Sulfate	**15,000** mg/L
TDS	**35,800** mg/L
CoD	**860** mg/L
pH	**9.76** mg/L

MWR-1	
BTEX	<0.0045 mg/L
Chloride	28 mg/L
Sulfate	41 mg/L
TDS	914 mg/L

MW-3	
BTEX	<0.0045 mg/L
Chloride	21 mg/L
Sulfate	14 mg/L
TDS	516 mg/L

RE: USGS Aerial Photograph.

LEGEND

- MONITOR WELL
- RE-DRILL TO REPLACE MW-1
- PLUGGED AND ABANDONED JUNE 24, 2003

SAMPLE ID	
CONSTITUENT	CONCENTRATION, unit

NOTE: Values in BOLD indicate an exceedance of NMWQCC groundwater standard.

Figure 4

JUNE 2013 CONSTITUENTS OF CONCERN CONCENTRATION MAP
WINGATE FRACTIONATOR PLANT
ANNUAL GROUNDWATER SAMPLING
GALLUP, NEW MEXICO
ConocoPhillips Company

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TABLES

TABLE 1

MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATIONS
CONOCOPHILLIPS COMPANY
WINGATE FRACTIONATOR PLANT
GALLUP, NEW MEXICO

Well ID	*Total Depth (ft)*	*TOC Elevation (ft msl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft bgs)*	*Relative Water Level (ft msl)*
MW-2	45	6585.91	20-45	6/24/2013	4.06	6581.85
MW-3	45	6590.08	20-45	6/24/2013	4.64	6585.44
MWR-1	45	6585.13	20-45	6/24/2013	6.00	6579.13
MWS-1	15	--	5-15	6/24/2013	DRY	--
MWS-2	15	--	5-15	6/24/2013	DRY	--

Notes:

1. bgs - below ground surface
2. ft - feet
3. msl - mean sea level
4. MW - Monitor Well
5. MWR - Redrilled Monitor Well
6. TOC - top of casing
7. WMW - Monitor well within the Wingate site boundary

TABLE 2

GROUNDWATER ANALYTICAL RESULTS SUMMARY
CONOCOPHILLIPS COMPANY
WINGATE FRACTIONATOR PLANT
GALLUP, NEW MEXICO

		Benzene (mg/L)	*Toluene (mg/L)*	*Ethylbenzene (mg/L)*	*Xylenes (total) (mg/L)*	*TPH-GRO (mg/L)*	*Naphthalene (mg/L)*	*Arsenic (dissolved) (mg/L)*	*Barium (dissolved) (mg/L)*	*Cadmium (dissolved) (mg/L)*	*Calcium (mg/L)*	*Chromium (dissolved) (mg/L)*	*Iron (dissolved) (mg/L)*	*Iron (mg/L)*	*Lead (dissolved) (mg/L)*	*Lead (mg/L)*	*Magnesium (dissolved) (mg/L)*	*Manganese (dissolved) (mg/L)*	*Manganese (mg/L)*	*Mercury (mg/L)*	*Selenium (dissolved) (mg/L)*	*Silver (dissolved) (mg/L)*	*Sodium (dissolved) (mg/L)*	*Uranium-238 (mg/L)*	*Alkalinity (mg/L)*	*BOD (mg/L)*	*Chloride (mg/L)*	*COD (mg/L)*	*Nitrate (as N) (mg/L)*	*pH*	*Sulfate (mg/L)*	*Total Coliform (colonies/ 100 mL)*	*TDS (mg/L)*
MWR-1	7/31/2003	<0.0005	<0.0007	<0.0008	<0.0008	<	--	0.0114	**1.87**	<0.00087	92.4	**0.0522**	--	--	**0.0562**	--	46.1	--	--	<0.00016	0.0086	<0.0018	397	--	725	9.2	154	32.1	<0.40	7.9	147	--	**1340**
	9/24/2004	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.0047	0.252	<0.00076	12.5	<0.0025	--	--	<0.0100	--	7.56	--	--	<0.00028	<0.0059	<0.0020	291	--	553	11.0	30.5	20.6	<0.40	8.0	27.0	<1.0	712
	6/21/2005	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.0093	0.191	<0.00097	10.2	<0.0048	--	--	<0.0084	--	6.02	--	--	<0.000062	<0.0094	<0.0020	278	--	611	<3.5	30.5	12.9	<0.40	7.9	38.0	<1.0	775
	6/21/2006	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.01	0.221	<0.00091	11.1	<0.0023	--	--	<0.0069	--	6.61	--	--	<0.000056	<0.0094	<0.0016	317	--	611	<5.0	24.3	16.7	0.26	8.1	43.6	<1.0	684
	6/19/2007	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.01	0.728	<0.00090	31.30	0.0176	--	--	0.0126	--	15.2	--	--	0.000058	<0.0094	<0.0016	331	--	705	15.9	34.1	68.5	<0.25	8.2	58.8	<1.0	886
	7/1/2008	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	0.225	<0.005	10.90	<0.005	--	3.0	<0.005	--	6.53	--	0.369	<0.0002	<0.005	<0.005	299	--	579	<2.0	29.6	9.41	<1	8.1	37.9	<1.0	865
	6/24/2009	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	0.488	<0.005	19.70	0.00666	--	9.07	<0.005	--	7.89	--	0.577	<0.0002	<0.005	<0.005	332	--	600	2.87	25.2	17.5	<0.5	7.96	39.9	10	793
	6/21/2010	<0.001	<0.001	<0.001	<0.001	--	<0.0053	<0.0050	0.176	<0.0050	8.33	<0.0050	0.0306	--	<0.0050	--	5.14	**0.271**	--	<0.002	<0.01	<0.005	344	--	589	<2.0	33.4	11.9	0.603	7.75	41.5	<1	**1200**
	6/29/2011	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.0050	<0.005	0.254	<0.004	--	<0.01	0.145	--	<0.003	--	6.21	**0.266**	--	--	<0.005	<0.01	314	--	620	<2.0	27.8	32.3	<0.50	8.00	45.3	<1.0	813
	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.010	<0.010	0.192	<0.005	7.90	<0.005	--	--	<0.005	--	--	**--**	--	<0.0002	<0.015	<0.007	348	0.00086	--	<2.0	35.5	12.8	<0.1	8.1	52.7	<1.0	858
	6/25/2013	<0.0010	<0.0010	<0.0010	<0.0015	--	<0.0020	<0.001	0.20	<0.002	9.8	<0.0060	--	--	<0.001	--	--	**--**	--	<0.00020	0.0010	<0.005	340	0.0010	700	3.3**	28	14	<0.10	8.06	41	9.8	914
MW-2	5/14/2003	<0.0001	<0.001	<0.001	<0.002	--	<0.0096	<0.01	0.21	<0.002	14.70	<0.005	--	--	<0.003	--	7.9	--	--	--	--	--	418	--	770	--	64.4	--	<0.5	--	102	--	**1140**
	9/24/2004	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.0009	0.0131	0.126	<0.00076	6.30	<0.0025	--	--	<0.0100	--	2.96	--	--	<0.000028	<0.0059	<0.0020	321	--	718	<6.0	29.6	26.70	<0.40	8.3	4.4	<1.0	860
	6/21/2005	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0196	0.141	<0.00097	6.45	<0.0048	--	--	<0.0084	--	3.14	--	--	<0.000062	<0.0094	<0.0020	310	--	708	<2.5	38.9	32.40	<0.40	8.2	18.6	<1.0	878
	6/21/2006	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0212	0.141	<0.00091	7.16	<0.0023	--	--	<0.0069	--	e	--	--	<0.000056	<0.0094	<0.0016	384	--	712	<5.8	38.6	28.30	<0.25	8.2	22.9	<1.0	908
	6/19/2007	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0190	0.139	<0.00090	6.73	<0.0023	--	--	<0.0069	--	3.41	--	--	<0.000056	<0.0094	<0.0016	284	--	708	<3.8	33.0	29.0	1.3	8.3	13.3	<1.0	888
	7/2/2008	<0.005	<0.005	<0.005	<0.005	--	<0.005	0.00783	0.223	<0.005	13.2	<0.005	0.601	--	<0.005	--	9.6	--	0.354	<0.0002	<0.005	<0.005	361	--	626	<2.0	62.9	7.23	<0.5	7.77	125	<1.0	**1050**
	6/23/2009	<0.005	<0.005	<0.005	<0.005	--	<0.005	0.0115	0.255	<0.005	14.5	<0.005	0.611	--	<0.005	--	8.18	--	0.314	<0.0002	<0.005	<0.005	403	--	580	<2	57.3	40	<0.5	7.94	113	7	**1030**
	6/21/2010	<0.001	<0.001	<0.001	<0.001	--	<0.0053	0.008	0.210	<0.005	13.2	<0.005	0.180	--	<0.005	--	7.75	**0.317**	--	<0.002	<0.01	<0.005	396	--	690	<2.0	57.1	9.52	0.555	8.55	107	<1	**1360**
	6/29/2011	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.0050	0.0094	0.205	<0.004	--	<0.01	0.175	--	<0.003	--	7.45	**0.33**	--	--	<0.005	<0.01	363	--	664	<2.0	58.0	<20	<0.50	7.81	122	<1.0	**1010**
	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.010	<0.010	0.241	<0.005	13.8	<0.005	--	--	<0.005	--	--	**--**	--	<0.0002	<0.015	<0.007	401	0.018	--	<2.0	72.9	13.0	<0.10	7.9	145	<1.0	**1030**
	6/25/2013	<0.0010	<0.0010	<0.0010	<0.0015	--	<0.0020	0.016	0.15	<0.0020	7.9	<0.0060	--	--	<0.0010	--	--	**--**	--	<0.00020	0.0015	<0.0050	320	<0.0010	710	24**	27	44	<0.50	8.22	4.2	<1	868
MW-3	5/14/2003	<0.0001	<0.001	<0.001	<0.002	--	<0.0096	<0.01	<0.2	<0.002	28.70	<0.005	--	--	<0.003	--	13.5	--	--	--	--	--	149	--	428	<4.0	19.2	<	<0.5	--	15.5	--	542
	9/24/2004	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.0047	0.150	<0.00076	27.9	<0.0025	--	--	<0.0100	--	13.4	--	--	<0.00028	<0.0059	<0.0020	156	--	419	5.2	19.6	<1.4	<0.40	7.8	14.6	<1.0	493
	6/21/2005	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0108	0.160	<0.00097	26.6	<0.0048	--	--	0.0084	--	12.8	--	--	<0.000062	<0.0094	<0.0020	144	--	415	<2.2	20.6	7.4	<0.40	7.6	13.3	<1.0	488
	6/21/2006	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.010	0.16	<0.00091	27.4	<0.0023	--	--	<0.0069	--	13.3	--	--	<0.000056	<0.0094	<0.0016	161	--	394	<2.0	19.5	6.8	<0.25	7.7	14.9	<1.0	507
	6/19/2007	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.010	0.143	<0.00090	28.4	<0.0023	--	--	<0.0069	--	13.5	--	--	<0.000056	<0.0094	<0.0016	170	--	417	<2.5	22.1	19.7	<0.25	7.7	17.3	--	510
	7/1/2008	<0.005	<0.005	<0.005	<0.005	--	<0.005	0.0388	0.307	<0.005	27.5	<0.005	--	4.66	<0.005	--	13.2	--	1.97	<0.002	<0.005	<0.005	151	--	382	<2.0	19.3	7.06	<1	7.64	15.4	12	538
	6/23/2009	<0.005	<0.005	<0.005	<0.005	--	<0.005	0.00654	0.178	<0.005	29.5	<0.005	0.255	--	<0.005	--	14.5	--	0.703	<0.0002	<0.005	<0.005	172	--	339	<2	23.6	7.5	<0.5	7.74	26.5	<1	519
	6/23/2010	<0.001	<0.001	<0.001	<0.001	--	<0.0054	<0.0050	0.144	<0.005	27.6	<0.005	<0.02	--	<0.005	--	13.7	**0.480**	--	<0.002	<0.01	<0.005	162	--	148	<2.0	20.5	7.5	<0.5	7.31	18.8	<1	600
	6/28/2011	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.0050	<0.005	<0.2	<0.004	--	<0.01	<0.1	--	<0.003	--	14	**0.525**	--	--	<0.005	<0.01	165	--	320	<2.0	23.6	<20	<0.50	7.62	18.7	<1.0	514
	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.010	<0.010	0.140	<0.005	25.2	<0.005	--	--	<0.005	--	--	**--**	--	<0.0002	<0.015	<0.007	167	0.0009	--	<2.0	22.4	<10.0	<0.10	7.7	18.8	<1.0	512
	6/25/2013	<0.0010	<0.0010	<0.0010	<0.0015	--	<0.0020	0.0066	0.14	<0.0020	28	<0.0060	--	--	<0.0010	--	--	**--**	--	<0.00020	0.0016	<0.0050	170	<0.0010	420	5.8	21	<10	<0.10	7.77	14	<1	516
NMWQCC Groundwater Quality Standards		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**0.03**	**0.1**	**1.0**	**0.01**	**NE**	**0.05**	**1.0**	**NE**	**0.05**	**NE**	**NE**	**0.2**	**NE**	**0.002**	**0.05**	**0.05**	**1140**	**0.03**	**NE**	**30**	**250**	**125**	**10**	**6.00-9.00**	**600**	**NE**	**1000**

Notes:
MW = monitoring well
NMWQCC = New Mexico Water Quality Control Commission
Constituents in **BOLD** are in excess of NMWQCC groundwater quality standards
mg/L = milligrams per liter (parts per million)
< 1.0 = Below laboratory detection limit of 1.0 mg/L
NA = not analyzed
NE = not established
* = Results reported for total metals analysis, results can not be compared to NMWQCC Standards for dissolved metals
** = Result is reported as an estimate
BOD = Biological oxygen demand
COD = Chemical oxygen demand
TDS = Total dissolved solids

TABLE 3

EVAPORATION POND WATER ANALYTICAL RESULTS SUMMARY
CONOCOPHILLIPS COMPANY
WINGATE FRACTIONATOR PLANT
GALLUP, NEW MEXICO

		Benzene (mg/L)	*Toluene (mg/L)*	*Ethylbenzene (mg/L)*	*Xylenes (total) (mg/L)*	*TPH-GRO (mg/L)*	*Naphthalene (mg/L)*	*Arsenic (dissolved) (mg/L)*	*Barium (dissolved) (mg/L)*	*Cadmium (dissolved) (mg/L)*	*Calcium (mg/L)*	*Chromium (dissolved) (mg/L)*	*Iron (dissolved) (mg/L)*	*Iron (mg/L)*	*Lead (dissolved) (mg/L)*	*Lead (mg/L)*	*Magnesium (dissolved) (mg/L)*	*Manganese (dissolved) (mg/L)*	*Manganese (mg/L)*	*Mercury (mg/L)*	*Selenium (dissolved) (mg/L)*	*Silver (dissolved) (mg/L)*	*Sodium (dissolved) (mg/L)*	*Uranium-238 (mg/L)*	*Alkalinity (mg/L)*	*BOD (mg/L)*	*Chloride (mg/L)*	*COD (mg/L)*	*Nitrate (as N) (mg/L)*	*pH*	*Sulfate (mg/L)*	*Total Coliform (colonies/ 100 mL)*	*TDS (mg/L)*
East Pond	9/23/2004	<0.003	<0.004	<0.004	<0.004	--	<0.001	<0.0047	0.0730	<0.00076	1080	0.0029	--	--	<0.0100	--	625	--	--	<0.000028	0.0061	<0.0020	**12400**	--	148	18.9	**19600**	**150**	<0.40	**9.8**	**6690**	>200.5	**46200**
	6/20/2005	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.0093	0.0731	<0.00097	1010	<0.0048	--	--	<0.0084	--	488	--	--	<0.000062	<0.0094	<0.0020	**9560**	--	110	--	**13000**	--	<0.40	**10.4**	**5090**	--	**31100**
	6/21/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.7	--	105	--	--	--	>200.5	--
	6/21/2006	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0113	0.117	<0.00091	1400	<0.0023	--	--	<0.0069	--	889	--	--	<0.000056	<0.0094	<0.0016	**9640**	--	156	<11.9	**13000**	**147**	<0.25	**10.4**	**9180**	8.7	**34800**
	6/19/2007	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	<0.01	0.0667	<0.00090	251	<0.0023	--	--	<0.0069	--	161	--	--	<0.000056	<0.0094	<0.0016	**4340**	--	103	<9.8	**5720**	**462**	1.3	**9.8**	**5860**	>200.5	**19700**
	7/2/2008	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	0.0813	<0.005	1070	<0.005	<0.02	--	<0.005	--	736	<0.005	--	<0.002	<0.005	<0.005	**3890**	--	76	<2.0	**4880**	94	<5.0	**10**	**7690**	<1.0	**16200**
	6/24/2009	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	0.0443	<0.005	849	0.00521	<0.02	--	<0.005	--	605	<0.25	--	<0.0002	<0.01	<0.005	**2510**	--	88	4.4	**2270**	67.5	<0.5	**10**	**5360**	4	**13000**
	6/21/2010	<0.01	<0.01	<0.01	<0.01	--	<0.0066	<0.05	<0.05	<0.05	1160	<0.05	<0.2	--	<0.05	--	940	<0.05	--	<0.002	<0.1	<0.05	**3370**	--	143	5.54	**3680**	107	<50	**9.99**	**8320**	>2416.6	**2670**
	6/28/2011	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.0050	0.0073	<0.2	<0.004	--	<0.01	<0.1	--	<0.003	--	979	0.0296	--	--	<0.005	<0.01	**3990**	--	99.0	5.5	**4320**	**132**	<5.0	**9.60**	**10300**	>2416.6	**20600**
	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0030	--	<0.010	<0.010	0.0488	<0.005	997	<0.005	--	--	<0.005	--	--	--	--	<0.0002	<0.015	<0.007	**4670**	0.0121	--	9.4	**4540**	**171**	<0.10	8.7	**10100**	>2419.6	**23300**
	6/25/2013	<0.0020	<0.0020	<0.0020	<0.0030	--	<0.0040	0.011	0.064	<0.0020	720	<0.0060	-	--	<0.010	--	--	--	--	<0.00020	0.025	<0.50	**7900**	0.012	230	5.1**	**6300**	**860**	<1.0	**9.76**	**15000**	>2419.6	**35800**
West Pond	9/23/2004	<0.01	<0.014	<0.016	<0.016	--	<0.001	0.0362	0.0858	<0.00076	698	0.0051	--	--	<0.0100	--	8830	--	--	<0.000028	0.0199	<0.0020	**57900**	**--**	469	**62.5**	**90300**	**1210**	<80	8.5	**29500**	<1.0	**209000**
	6/20/2005	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0253	0.103	0.0016	539	<0.0048	--	--	<0.0840	--	4950	--	--	<0.000062	0.0145	0.0077	**142000**	**--**	357	--	**180000**	--	<1600	7.7	**16400**	--	**369000**
	6/21/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	**775**	--	--	--	<1.0	--
	6/19/2007	<0.0005	<0.0007	<0.0008	<0.0008	--	<0.001	0.0193	0.0591	<0.00090	34.4	<0.0023	--	--	<0.0069	--	18.1	--	--	0.00012	<0.0094	0.0069	283	--	416	<42.42	**36000**	**10200**	<2.5	7.9	**19600**	<1.0	**361000**
	7/2/2008	<0.005	<0.005	<0.005	<0.005	--	<0.0055	0.0468	0.0207	<0.005	257	0.0062	0.223	--	<0.005	--	14800	--	5.79	<0.0002	0.00788	<0.005	**59900**	--	799	**30.8**	**153000**	**2940**	<50	7.46	**15400**	<1.0	**285000**
	6/24/2009	<0.005	<0.005	<0.005	<0.005	--	<0.005	0.0336	<0.1	<0.1	440	<0.25	0.197	--	<0.1	--	5250	--	1.2	<0.0002	<0.01	<0.1	**68000**	--	435	7.7	**173000**	**1600**	<2500	8.1	**14800**	<1	**397000**
	6/21/2010	<0.01	<0.01	<0.01	<0.01	--	<0.0066	<0.1	<0.1	<0.1	192	<0.1	<0.4	--	<0.1	--	30200	**5.04**	--	<0.002	<0.2	<0.1	**53800**	--	1530	11.6	**165000**	**2950**	<50	7.06	**38100**	<1	**53200**
	6/28/2011	0.0098 J	0.0186 J	0.0066 J	<0.075	--	<0.13	**0.152**	<2	<0.04	--	<0.1	<1	--	<0.06	--	36700	**7.66**	--	--	<0.05	<0.1	**63200**	--	2130	**48.2**	**204000**	**4650**	<50	7.02	**190000**	<1.0	**37400**
	6/19/2012	--	--	--	--	--	--	**--**	--	--	--	**--**	--	--	--	**--**	--	--	--	--	**--**	--	--	--	**--**	--	--	--	**--**	--	--	--	--
	6/25/2013	--	--	--	--	--	--	**--**	--	--	--	**--**	--	--	--	**--**	--	--	--	--	**--**	--	--	--	**--**	--	--	--	**--**	--	--	--	--

Notes:
MW = monitoring well
mg/L = milligrams per liter (parts per million)
< 1.0 = Below laboratory detection limit of 1.0 mg/L
NA = not analyzed
** = Result is reported as an estimate
BOD = Biological oxygen demand
COD = Chemical oxygen demand
TDS = Total dissolved solids

APPENDIX A

HISTORICAL BORING LOGS

PROJECT NAME: 3690050
LOCATION: Wingate Gas Fractionating Plant

DRILLED BY: Kleinfelder Drilling
DATE: HOLE STARTED: 6-23-03
DATE: COMPLETED: 6-26-03

REMARKS: bgs = below ground surface
NA=Not Applicable, NS=No Sample
MW=Monitoring Well
msl = mean sea level
TOC = Top of Casing

MONITORING WELL NO. MWR-1
FIELD LOGGED BY: K.Henderson
ELEVATION: GROUND SURFACE (msl): Not Recorded (ft)
GROUNDWATER (below TOC): 5.8 feet bgs (ft)
DRILL TYPE: Hollow Stem Auger
CME 75
BORE HOLE DIAMETER: 10.0 (in)

WELL COMPLETION INFORMATION

Measuring Point Description: Top of Casing
Measuring Point Elevation (feet):
Static Water Level (feet): 5.8
First Occurance of Groundwater (feet): 20.40
Well Development: NA
Well Cap: Locking Metal Above Ground Well Protector

Type of Casing: PVC
Casing Diameter: 2 inches with prepacked screen
Slot Size: 0.010

ELEVATION (msl) - ft	SAMPLE INTERVAL/ID	COMPLETION DIAGRAM	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	BLOW COUNT	ANALYTICAL	TIME	% RECOVERY	PID RESULT (ppm)	DEPTH (bgs) - ft
0.0			CLAY, trace silt, soft, orangish-brown, damp, trace very thin laminations of white crystalline powder	CL	Hand Auger to 2.5 feet into hard clay	NS	1310	100		0
			CLAY, soft to medium stiff, trace organic material and white crystalline powder, orangish-brown, damp	CL	2-4-5			100	20.3	
-5.0		Static Water Level								5
-10.0		BENTONITE GROUT	CLAY, hard, trace silt and white crystalline powder, damp	CL-CH	6-15-18			100	4.7	10
-15.0		BENTONITE SEAL	CLAY, very stiff, orangish-brown, trace organic material, damp	CH	7-11-17			100	5.7	15

Boring Terminated at 45' bgs

Split Spoon Sample

3690050	MAXIM TECHNOLOGIES INC®	EXPLORATORY BORING LOG	MWR-1

PROJECT NAME: 3690050
LOCATION: Wingate Gas Fractionating Plant

DRILLED BY: Kleinfelder Drilling
DATE: HOLE STARTED: 6-23-03
DATE: COMPLETED: 6-26-03

REMARKS: bgs = below ground surface
NA=Not Applicable, NS=No Sample
MW=Monitoring Well
msl = mean sea level
TOC = Top of Casing

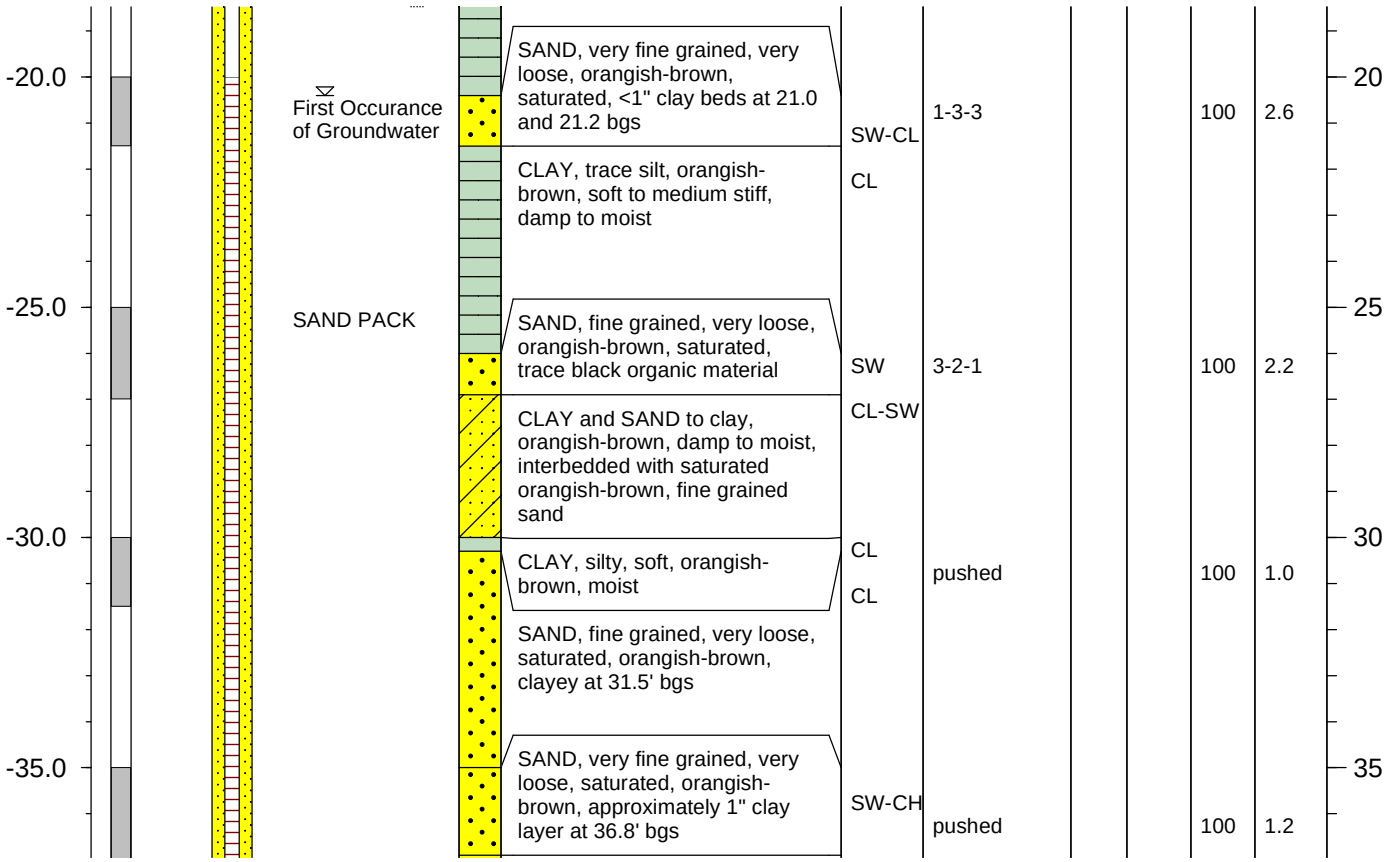
MONITORING WELL NO. MWR-1
FIELD LOGGED BY: K.Henderson
ELEVATION: GROUND SURFACE (msl): Not Recorded (ft)
GROUNDWATER (below TOC): 5.8 feet bgs (ft)
DRILL TYPE: Hollow Stem Auger
CME 75
BORE HOLE DIAMETER: 10.0 (in)

WELL COMPLETION INFORMATION

Measuring Point Description: Top of Casing
Measuring Point Elevation (feet):
Static Water Level (feet): 5.8
First Occurance of Groundwater (feet): 20.40

Well Development: NA
Well Cap: Locking Metal Above Ground Well Protector

Type of Casing: PVC
Casing Diameter: 2 inches with prepacked screen
Slot Size: 0.010



Boring Terminated at 45' bgs

Split Spoon Sample

3690050	MAXIM TECHNOLOGIES INC®	EXPLORATORY BORING LOG	MWR-1

PROJECT NAME: 3690050
LOCATION: Wingate Gas Fractionating Plant

DRILLED BY: Kleinfelder Drilling
DATE: HOLE STARTED: 6-23-03
DATE: COMPLETED: 6-26-03

REMARKS: bgs = below ground surface
NA=Not Applicable, NS=No Sample
MW=Monitoring Well
msl = mean sea level
TOC = Top of Casing

MONITORING WELL NO. MWR-1
FIELD LOGGED BY: K.Henderson
ELEVATION: GROUND SURFACE (msl): Not Recorded (ft)
GROUNDWATER (below TOC): 5.8 feet bgs (ft)
DRILL TYPE: Hollow Stem Auger
CME 75
BORE HOLE DIAMETER: 10.0 (in)

WELL COMPLETION INFORMATION

Measuring Point Description: Top of Casing
Measuring Point Elevation (feet):
Static Water Level (feet): 5.8
First Occurance of Groundwater (feet): 20.40
Well Development: NA
Well Cap: Locking Metal Above Ground Well Protector

Type of Casing: PVC
Casing Diameter: 2 inches with prepacked screen
Slot Size: 0.010

ELEVATION (msl) - ft	SAMPLE INTERVAL/ID	COMPLETION DIAGRAM	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	BLOW COUNT	ANALYTICAL	TIME	% RECOVERY	PID RESULT (ppm)	DEPTH (bgs) - ft
-40.0		Threaded Bottom Cap	SAND, fine and medium grained, saturated, brownish-gray, very loose	SW-CH						40
			CLAY, orangish-borwn, moist to wet, silty at 40.4' bgs	CL	pushed			100	0.4	
			SAND, fine and medium grained, very loose, brownish-gray and orangish-brown, saturated, <1" clay beds at 45.4 and 46.8 feet bgs	SW						
-45.0					pushed		1415	100	0.5	45

Boring Terminated at 45' bgs

Split Spoon Sample

3690050	MAXIM TECHNOLOGIES INC®	EXPLORATORY BORING LOG	MWR-1

APPENDIX B

GROUNDWATER SAMPLING FIELD FORMS

WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME: Wingate Ponds JOB# 075167
SAMPLE ID: GW-075167-062513-cm-MWR-1 WELL# MWR-1

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	SAMPLE TIME (24 HOUR)	WATER VOL. IN CASING (GALLONS)	ACTUAL VOL. PURGED (GALLONS)
6/25/13	6/25/13	0900		4.0

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y (N) (CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED Y (N) (CIRCLE ONE)

PURGING DEVICE	C	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X= PURGING DEVICE OTHER (SPECIFY)
		B - PERISTALTIC PUMP	E - PURGE PUMP	H - WATERRA®	
SAMPLING DEVICE	C	C - BLADDER PUMP	F - DIPPER BOTTLE	X - OTHER	X= SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL	B	A - TEFLON	D - PVC		X= PURGING MATERIAL OTHER (SPECIFY)
		B - STAINLESS STEEL	E - POLYETHYLENE		
SAMPLING MATERIAL	B	C - POLYPROPYLENE	X - OTHER		X= SAMPLING MATERIAL OTHER (SPECIFY)
PURGE TUBING	B	A - TEFLON	D - POLYPROPYLENE	G - COMBINATION TEFLON/POLYPROPYLENE	X= PURGE TUBING OTHER (SPECIFY)
		B - TYGON	E - POLYETHYLENE		
SAMPLING TUBING	B	C - ROPE	F - SILICONE	X - OTHER	X= SAMPLING TUBING OTHER (SPECIFY)
FILTERING DEVICES 0.45	A	A - IN-LINE DISPOSABLE	B - PRESSURE		

FIELD MEASUREMENTS

DEPTH TO WATER (feet) WELL ELEVATION (feet)

WELL DEPTH (feet) GROUNDWATER ELEVATION (feet)

TIME	TEMPERATURE	pH	TDS	SC	DO	ORP	VOLUME
0845	16.93 (°C)	8.04 (std)	140.917 (g/L)	1410 (µS/cm)	1.71 (mg/L)	-128.1 (mV)	2.5 (gal)
0850	16.99 (°C)	8.06 (std)	0.915 (g/L)	1408 (µS/cm)	2.06 (mg/L)	-127.4 (mV)	3.25 (gal)
0850	17.24 (°C)	8.02 (std)	0.916 (g/L)	1409 (µS/cm)	1.80 (mg/L)	-123.2 (mV)	3.75 (gal)
	(°C)	(std)	(g/L)	(µS/cm)	(mg/L)	(mV)	(gal)
	(°C)	(std)	(g/L)	(µS/cm)	(mg/L)	(mV)	(gal)

FIELD COMMENTS

SAMPLE APPEARANCE: clear ODOR: none COLOR: Started Brown, ended very light brown SHEEN Y/N: no

WEATHER CONDITIONS: TEMPERATURE: 80° WINDY Y/N: yes PRECIPITATION Y/N (IF Y TYPE): no

SPECIFIC COMMENTS:

Purge Volume per Cycle ~400 mL / per minute

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE PRINT SIGNATURE

WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME: Wingate Ponds JOB# 075167

SAMPLE ID: GW-075767-062513-cm-mw-2 WELL# MW-2

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	SAMPLE TIME (24 HOUR)	WATER VOL. IN CASING (GALLONS)	ACTUAL VOL. PURGED (GALLONS)
6/25/13	6/25/13	1045		4.25

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y (N) (CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED Y (N) (CIRCLE ONE)

PURGING DEVICE	C	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X= PURGING DEVICE OTHER (SPECIFY)
SAMPLING DEVICE	C	B - PERISTALTIC PUMP C - BLADDER PUMP	E - PURGE PUMP F - DIPPER BOTTLE	H - WATERRA® X - OTHER	X= SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL	B	A - TEFLON	D - PVC		X= PURGING MATERIAL OTHER (SPECIFY)
SAMPLING MATERIAL	B	B - STAINLESS STEEL C - POLYPROPYLENE	E - POLYETHYLENE X - OTHER		X= SAMPLING MATERIAL OTHER (SPECIFY)
PURGE TUBING	E	A - TEFLON	D - POLYPROPYLENE	G - COMBINATION TEFLON/POLYPROPYLENE	X= PURGE TUBING OTHER (SPECIFY)
SAMPLING TUBING	E	B - TYGON C - ROPE	E - POLYETHYLENE F - SILICONE	X - OTHER	X= SAMPLING TUBING OTHER (SPECIFY)
FILTERING DEVICES 0.45	A	A - IN-LINE DISPOSABLE	B - PRESSURE		

FIELD MEASUREMENTS

DEPTH TO WATER ____ (feet) WELL ELEVATION ____ (feet)

WELL DEPTH ____ (feet) GROUNDWATER ELEVATION ____ (feet)

	TEMPERATURE	pH	TDS	SC	DO	ORP	VOLUME
1025	18.62 (°C)	8.32 (std)	0.874 (g/L)	1346 (µS/cm)	2.60 (mg/L)	-151.6 (mV)	2.25 (gal)
1030	18.56 (°C)	8.29 (std)	0.877 (g/L)	1349 (µS/cm)	2.0 (mg/L)	-151.0 (mV)	2.75 (gal)
1035	18.72 (°C)	8.29 (std)	0.879 (g/L)	1353 (µS/cm)	2.02 (mg/L)	-154.3 (mV)	3.25 (gal)
1040	18.56 (°C)	8.29 (std)	0.879 (g/L)	1350 (µS/cm)	1.56 (mg/L)	152.8 (mV)	3.75 (gal)
1045	18.60 (°C)	8.28 (std)	0.881 (g/L)	1355 (µS/cm)	1.52 (mg/L)	151.3 (mV)	4.25 (gal)

FIELD COMMENTS

SAMPLE APPEARANCE: clear w/ gray particulates ODOR: bio COLOR: green SHEEN Y/N: no

WEATHER CONDITIONS: TEMPERATURE: 85° WINDY Y/N: yes PRECIPITATION Y/N (IF Y TYPE): no

SPECIFIC COMMENTS:

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE PRINT SIGNATURE

WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME: O'Wingate Ponds JOB# 075167

SAMPLE ID: GW-075167-062513-CM-WMW-3 WELL# WMW-3

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	SAMPLE TIME (24 HOUR)	WATER VOL. IN CASING (GALLONS)	ACTUAL VOL. PURGED (GALLONS)
6/25/13	6/25/13	1320		6.0

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y (N) (CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED Y (N) (CIRCLE ONE)

PURGING DEVICE	C	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER
		B - PERISTALTIC PUMP	E - PURGE PUMP	H - WATERRA®
SAMPLING DEVICE	C	C - BLADDER PUMP	F - DIPPER BOTTLE	X - OTHER
PURGING MATERIAL	B	A - TEFLON	D - PVC	
		B - STAINLESS STEEL	E - POLYETHYLENE	
SAMPLING MATERIAL	B	C - POLYPROPYLENE	X - OTHER	
PURGE TUBING	B	A - TEFLON	D - POLYPROPYLENE	G - COMBINATION TEFLON/POLYPROPYLENE
		B - TYGON	E - POLYETHYLENE	
SAMPLING TUBING	B	C - ROPE	F - SILICONE	X - OTHER
FILTERING DEVICES 0.45	A	A - IN-LINE DISPOSABLE	B - PRESSURE	

X= PURGING DEVICE OTHER (SPECIFY)

X= SAMPLING DEVICE OTHER (SPECIFY)

X= PURGING MATERIAL OTHER (SPECIFY)

X= SAMPLING MATERIAL OTHER (SPECIFY)

X= PURGE TUBING OTHER (SPECIFY)

X= SAMPLING TUBING OTHER (SPECIFY)

FIELD MEASUREMENTS

DEPTH TO WATER ( ) (feet) WELL ELEVATION ( ) (feet)

WELL DEPTH ( ) (feet) GROUNDWATER ELEVATION ( ) (feet)

	TEMPERATURE	pH	TDS	SPC	DO	ORP	VOLUME
1300	20.68 (°C)	7.47 (std)	0.556 (g/L)	~~0.556~~ 856 (µS/cm)	2.12 (mg/L)	9.5 (mV)	4.0 (gal)
1305	21.00 (°C)	7.56 (std)	0.558 (g/L)	858 (µS/cm)	2.03 (mg/L)	9.2 (mV)	4.5 (gal)
1310	20.69 (°C)	7.50 (std)	0.558 (g/L)	858 (µS/cm)	2.02 (mg/L)	-4.3 (mV)	5.0 (gal)
1315	21.07 (°C)	7.55 (std)	0.557 (g/L)	856 (µS/cm)	2.03 (mg/L)	-6.9 (mV)	5.5 (gal)
1320	20.92 (°C)	7.60 (std)	0.558 (g/L)	858 (µS/cm)	1.89 (mg/L)	-13.7 (mV)	6.0 (gal)

FIELD COMMENTS

SAMPLE APPEARANCE: cloudy ODOR: none COLOR: light orange SHEEN Y/N: no

WEATHER CONDITIONS: TEMPERATURE: 85° WINDY Y/N: yes PRECIPITATION Y/N (IF Y TYPE): no

SPECIFIC COMMENTS:

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

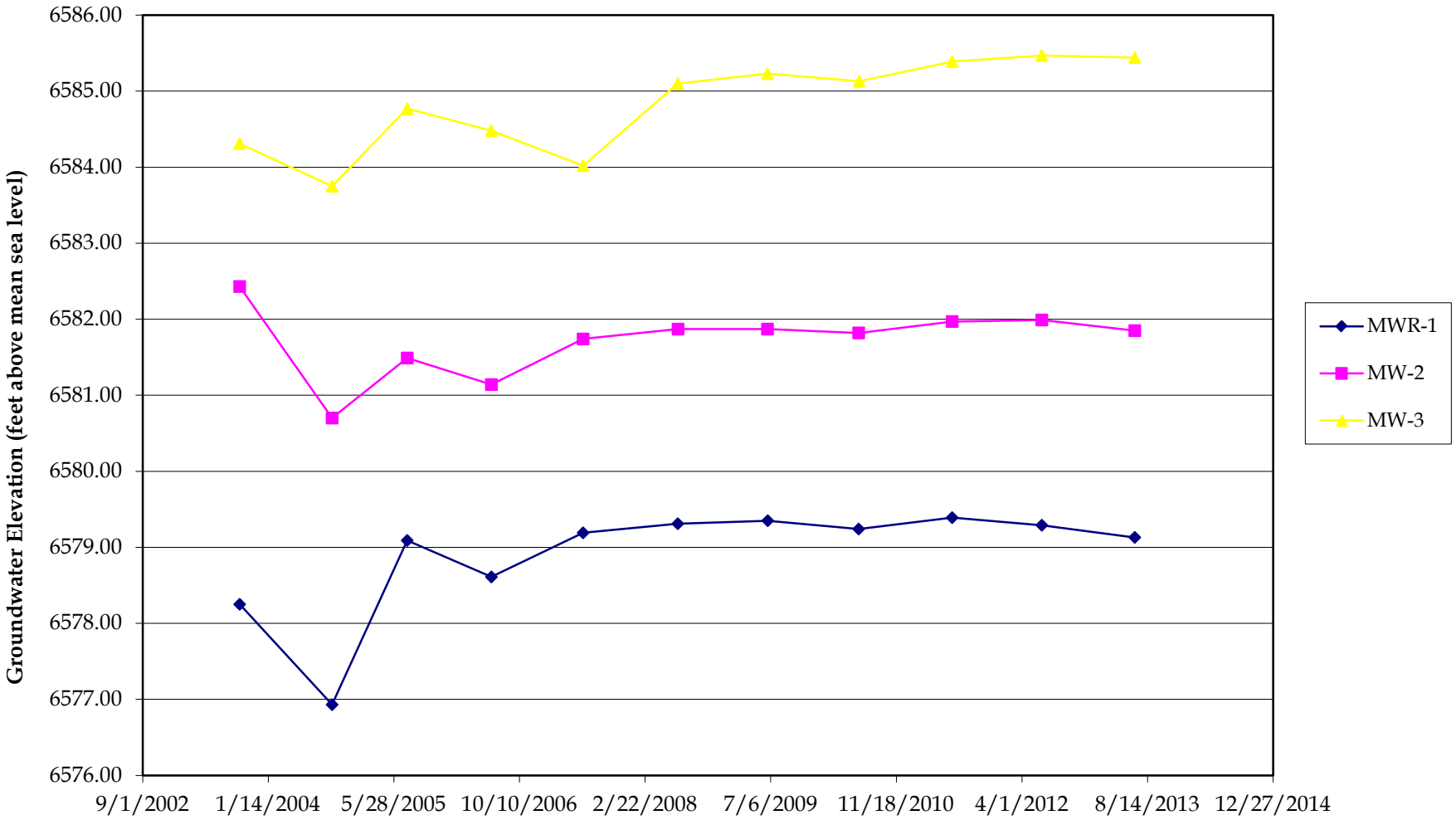
DATE PRINT SIGNATURE

APPENDIX C

ANALYTICAL CONCENTRATIONS VS. TIME GRAPHS AND SITE HYDROGRAPHS

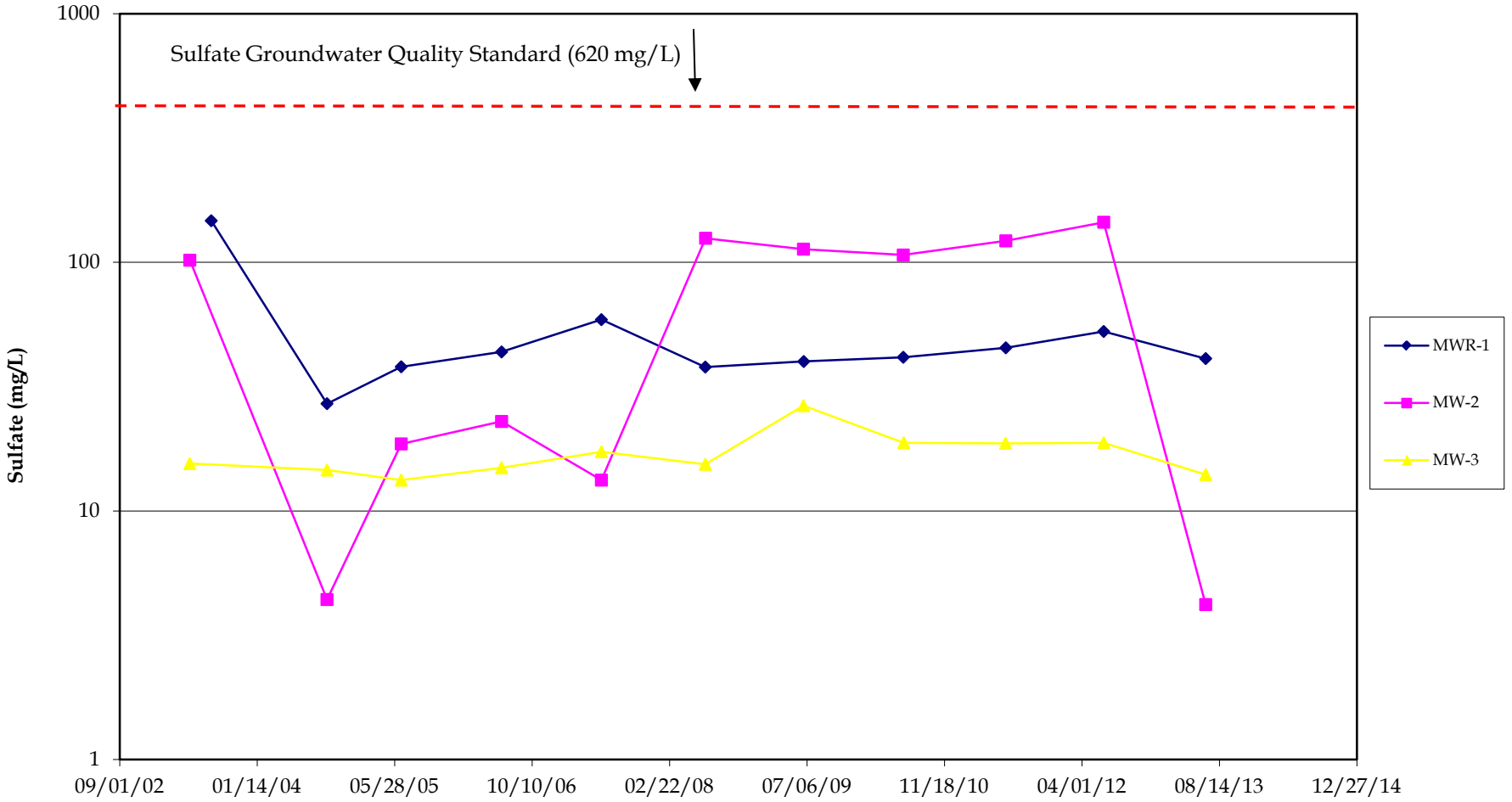
ConocoPhillips Company
Wingate Fractionator Plant

Groundwater Elevations vs. Time in Wingate Monitor Wells



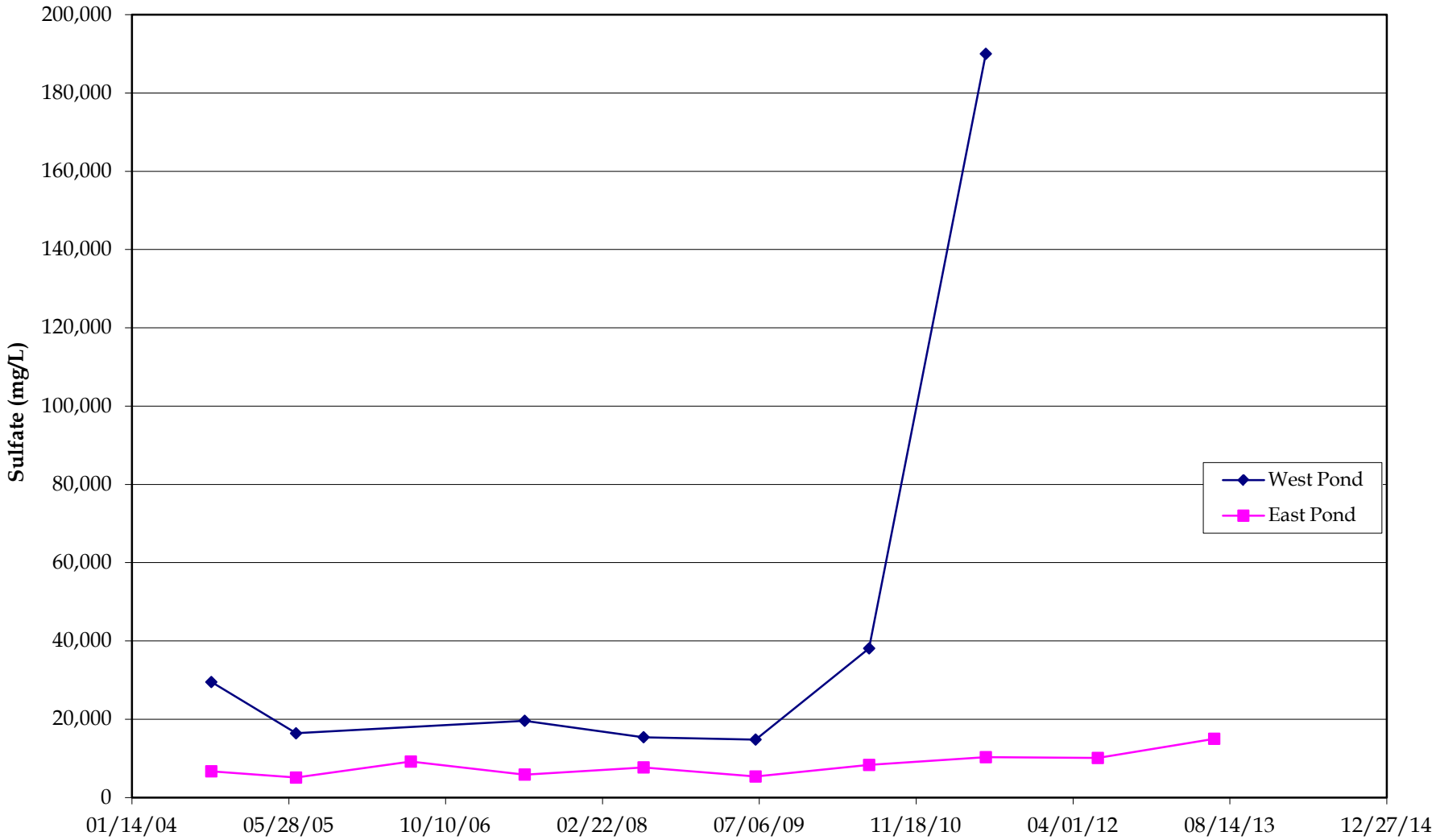
ConocoPhillips Company
Wingate Fractionator Plant

Sulfate (mg/L) vs Time in Wingate Monitor Wells



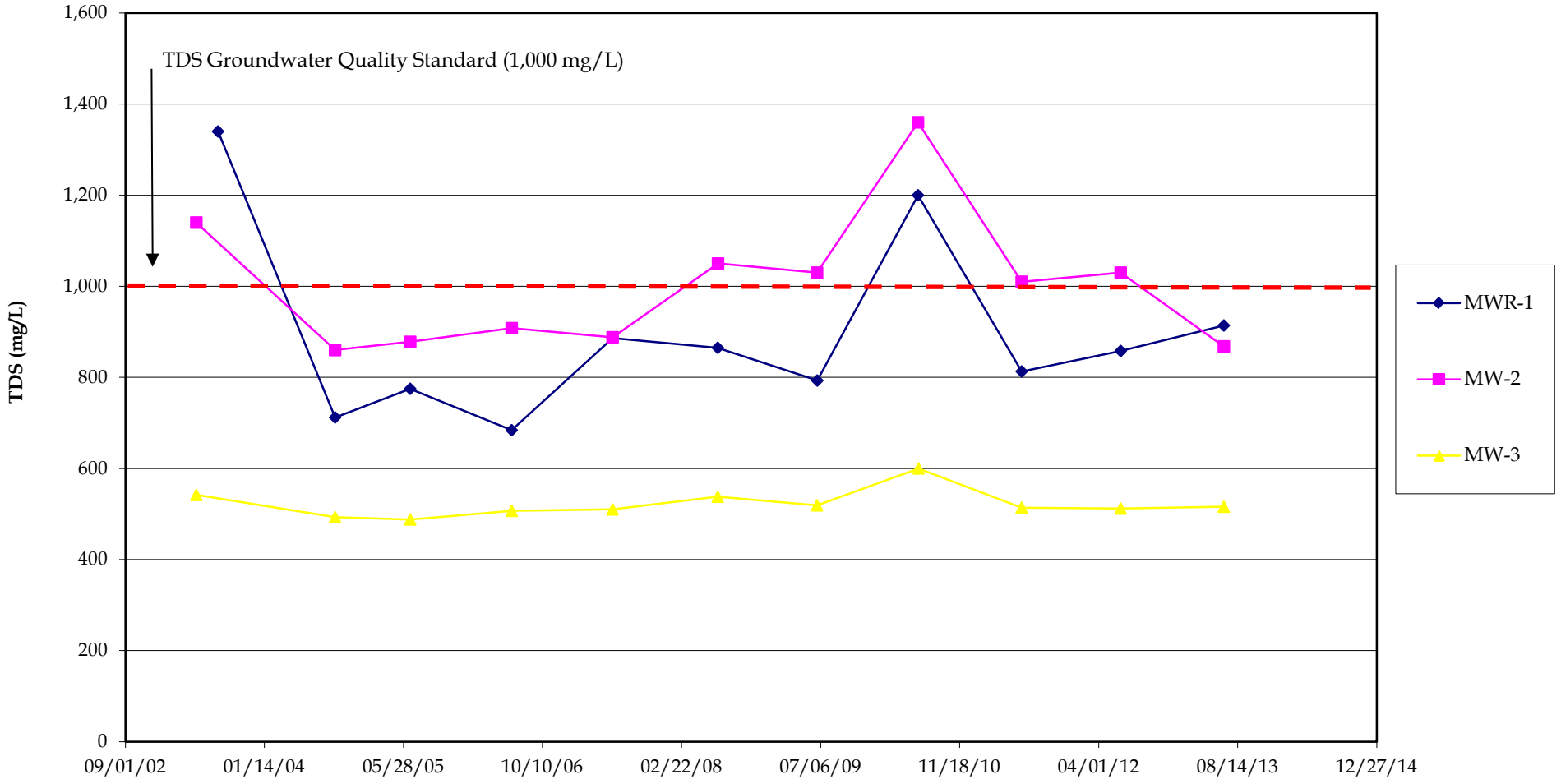
ConocoPhillips Company
Wingate Fractionator Plant

Sulfate vs. Time in Wingate Evaporation Ponds



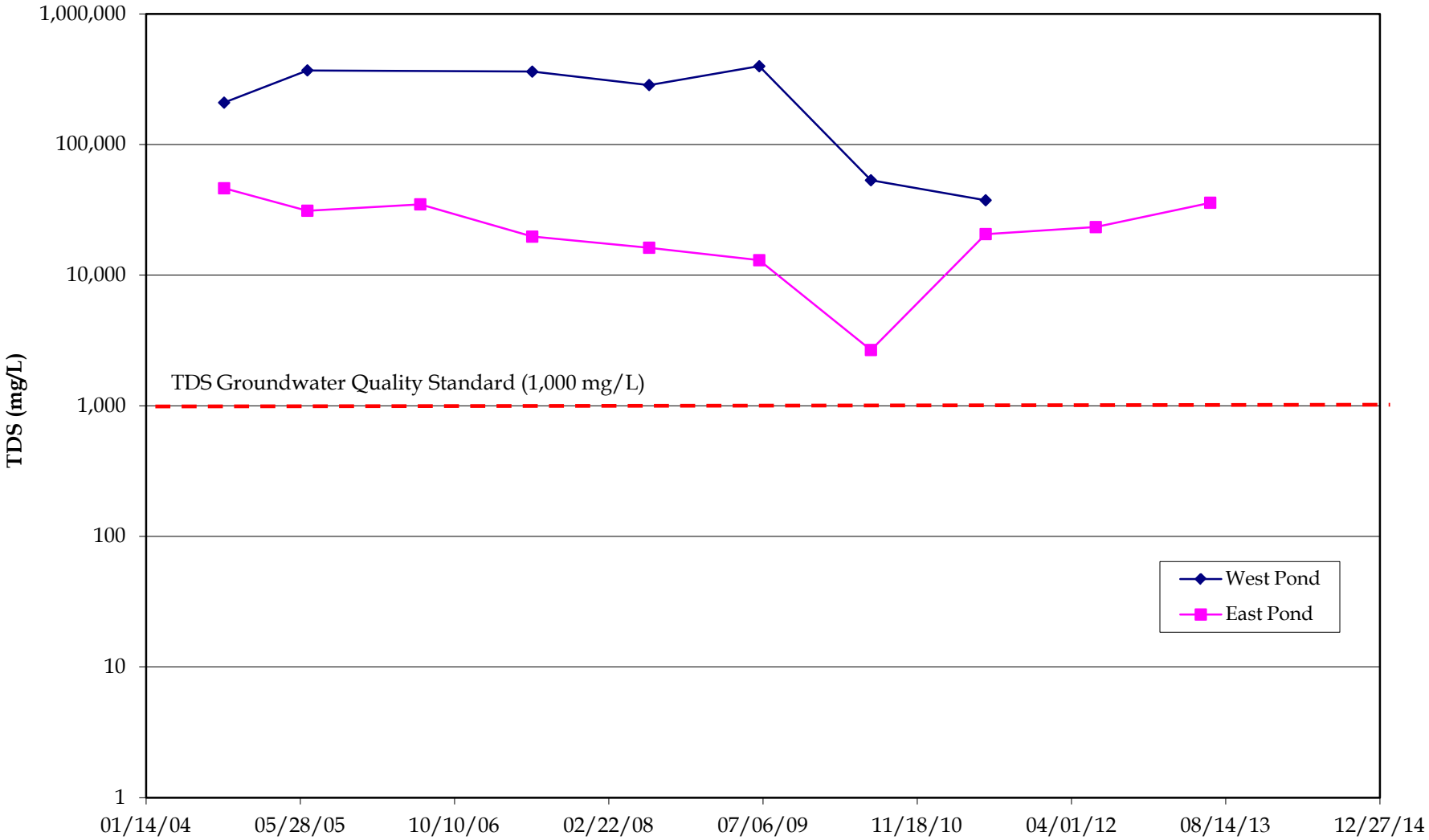
ConocoPhillips Company
Wingate Fractionator Plant

Total Dissolved Solids vs. Time in Wingate Monitor Wells



ConocoPhillips Company
Wingate Fractionator Plant

Total Dissolved Solids vs. Time in Wingate Evaporation Ponds



APPENDIX D

LABORATORY ANALYTICAL REPORT

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 05, 2013

Kelly Blanchard

Conoco Phillips
6356 SR 47 SE Junction 303
Albuquerque, NM 87105
TEL: (505) 237-8440
FAX

RE: Wingate Ponds OrderNo.: 1306A85

Dear Kelly Blanchard:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/25/2013 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 15, 2013.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Case Narrative

WO#: **1306A85**
Date: **8/5/2013**

CLIENT: Conoco Phillips
Project: Wingate Ponds

Analytical Comments:

Sample GW-075167-062513-CM-MWR-1 was analyzed 10 minutes past the holding time. This sample was received to close to the holding time.

All seed control samples for BOD over depleted. Samples are reported with an "E" flag indicating that the results are estimated.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MWR-
Project: Wingate Ponds
Collection Date: 6/25/2013 9:00:00 AM
Lab ID: 1306A85-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	28	10		mg/L	20	6/26/2013 8:36:20 PM	R11594
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	6/26/2013 8:23:56 PM	R11594
Sulfate	41	10		mg/L	20	6/26/2013 8:36:20 PM	R11594
EPA METHOD 200.7: METALS						Analyst: **ELS**	
Barium	0.20	0.0020		mg/L	1	7/3/2013 10:44:12 AM	8169
Cadmium	ND	0.0020		mg/L	1	7/2/2013 11:54:37 AM	8169
Calcium	9.8	1.0		mg/L	1	7/3/2013 10:44:12 AM	8169
Chromium	ND	0.0060		mg/L	1	7/2/2013 11:54:37 AM	8169
Silver	ND	0.0050		mg/L	1	7/2/2013 11:54:37 AM	8169
Sodium	340	5.0		mg/L	5	7/2/2013 11:59:01 AM	8169
EPA 200.8: METALS						Analyst: **DBD**	
Arsenic	ND	0.0010		mg/L	1	7/3/2013 12:05:50 PM	8169
Lead	ND	0.0010		mg/L	1	7/3/2013 12:05:50 PM	8169
Selenium	0.0010	0.0010		mg/L	1	7/3/2013 12:05:50 PM	8169
Uranium	0.0010	0.0010		mg/L	1	7/10/2013 6:22:31 PM	8169
EPA METHOD 245.1: MERCURY						Analyst: **IDC**	
Mercury	ND	0.00020		mg/L	1	7/2/2013 10:25:07 AM	8190
SM5210B: BOD						Analyst: **ECH**	
Biochemical Oxygen Demand	3.3	2.0	E	mg/L	1	7/1/2013 11:38:00 AM	8098
SM 9223B FECAL INDICATOR: E. COLI MPN						Analyst: **ECH**	
Total Coliform	9.8	1.0	H	CFU/100ml	1	6/26/2013 5:15:00 PM	8108
E. Coli	<1	1.0	H	CFU/100ml	1	6/26/2013 5:15:00 PM	8108
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Acenaphthylene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Aniline	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Anthracene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Azobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Benz(a)anthracene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Benzo(a)pyrene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Benzo(b)fluoranthene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Benzo(k)fluoranthene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Benzoic acid	ND	20		µg/L	1	7/1/2013 3:03:00 PM	8111
Benzyl alcohol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MWR-
Project: Wingate Ponds
Collection Date: 6/25/2013 9:00:00 AM
Lab ID: 1306A85-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Butyl benzyl phthalate	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Carbazole	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4-Chloroaniline	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2-Chloronaphthalene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2-Chlorophenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Chrysene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Di-n-butyl phthalate	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Di-n-octyl phthalate	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Dibenzofuran	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
1,2-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
1,3-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
1,4-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Diethyl phthalate	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Dimethyl phthalate	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2,4-Dichlorophenol	ND	20		µg/L	1	7/1/2013 3:03:00 PM	8111
2,4-Dimethylphenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/1/2013 3:03:00 PM	8111
2,4-Dinitrophenol	ND	20		µg/L	1	7/1/2013 3:03:00 PM	8111
2,4-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2,6-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Fluoranthene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Fluorene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Hexachlorobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Hexachlorobutadiene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Hexachloroethane	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Isophorone	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
1-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2-Methylphenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
3+4-Methylphenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MWR-
Project: Wingate Ponds
Collection Date: 6/25/2013 9:00:00 AM
Lab ID: 1306A85-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
N-Nitrosodimethylamine	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Naphthalene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2-Nitroaniline	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
3-Nitroaniline	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4-Nitroaniline	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Nitrobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2-Nitrophenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
4-Nitrophenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Pentachlorophenol	ND	20		µg/L	1	7/1/2013 3:03:00 PM	8111
Phenanthrene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Phenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Pyrene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Pyridine	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/1/2013 3:03:00 PM	8111
Surr: 2,4,6-Tribromophenol	76.0	41.5-117		%REC	1	7/1/2013 3:03:00 PM	8111
Surr: 2-Fluorobiphenyl	67.2	29.1-112		%REC	1	7/1/2013 3:03:00 PM	8111
Surr: 2-Fluorophenol	46.7	11.9-98.6		%REC	1	7/1/2013 3:03:00 PM	8111
Surr: 4-Terphenyl-d14	53.3	46-111		%REC	1	7/1/2013 3:03:00 PM	8111
Surr: Nitrobenzene-d5	72.0	34.9-112		%REC	1	7/1/2013 3:03:00 PM	8111
Surr: Phenol-d5	33.9	17.5-88.3		%REC	1	7/1/2013 3:03:00 PM	8111
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Toluene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Naphthalene	ND	2.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
2-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Acetone	ND	10		µg/L	1	6/28/2013 12:43:03 PM	R11661
Bromobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Bromodichloromethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Bromoform	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Bromomethane	ND	3.0		µg/L	1	6/28/2013 12:43:03 PM	R11661

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MWR-
Project: Wingate Ponds
Collection Date: 6/25/2013 9:00:00 AM
Lab ID: 1306A85-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
2-Butanone	ND	10		µg/L	1	6/28/2013 12:43:03 PM	R11661
Carbon disulfide	ND	10		µg/L	1	6/28/2013 12:43:03 PM	R11661
Carbon Tetrachloride	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Chlorobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Chloroethane	ND	2.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Chloroform	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Chloromethane	ND	3.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
2-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
4-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
cis-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Dibromochloromethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Dibromomethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1-Dichloroethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1-Dichloroethene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,3-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
2,2-Dichloropropane	ND	2.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Hexachlorobutadiene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
2-Hexanone	ND	10		µg/L	1	6/28/2013 12:43:03 PM	R11661
Isopropylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
4-Isopropyltoluene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
4-Methyl-2-pentanone	ND	10		µg/L	1	6/28/2013 12:43:03 PM	R11661
Methylene Chloride	ND	3.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
n-Butylbenzene	ND	3.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
n-Propylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
sec-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Styrene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
tert-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
trans-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MWR-
Project: Wingate Ponds
Collection Date: 6/25/2013 9:00:00 AM
Lab ID: 1306A85-001 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Trichlorofluoromethane	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Vinyl chloride	ND	1.0		µg/L	1	6/28/2013 12:43:03 PM	R11661
Xylenes, Total	ND	1.5		µg/L	1	6/28/2013 12:43:03 PM	R11661
Surr: 1,2-Dichloroethane-d4	87.6	70-130		%REC	1	6/28/2013 12:43:03 PM	R11661
Surr: 4-Bromofluorobenzene	101	69.5-130		%REC	1	6/28/2013 12:43:03 PM	R11661
Surr: Dibromofluoromethane	91.9	70-130		%REC	1	6/28/2013 12:43:03 PM	R11661
Surr: Toluene-d8	100	70-130		%REC	1	6/28/2013 12:43:03 PM	R11661
SM4500-H+B: PH						Analyst: **JML**	
pH	8.06	1.68	H	pH units	1	6/26/2013 3:34:49 PM	R11593
SM2320B: ALKALINITY						Analyst: **JML**	
Bicarbonate (As CaCO3)	700	20		mg/L CaCO3	1	6/26/2013 3:34:49 PM	R11593
Carbonate (As CaCO3)	ND	2.0		mg/L CaCO3	1	6/26/2013 3:34:49 PM	R11593
Total Alkalinity (as CaCO3)	700	20		mg/L CaCO3	1	6/26/2013 3:34:49 PM	R11593
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	914	40.0	*	mg/L	1	6/28/2013 3:22:00 PM	8145

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MW-2
Project: Wingate Ponds
Collection Date: 6/25/2013 10:45:00 AM
Lab ID: 1306A85-002 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	27	2.5		mg/L	5	6/26/2013 8:48:45 PM	R11594
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	6/26/2013 8:48:45 PM	R11594
Sulfate	4.2	2.5		mg/L	5	6/26/2013 8:48:45 PM	R11594
EPA METHOD 200.7: METALS						Analyst: **JLF**	
Barium	0.15	0.0020		mg/L	1	7/3/2013 5:16:05 PM	8218
Cadmium	ND	0.0020		mg/L	1	7/3/2013 5:16:05 PM	8218
Calcium	7.9	1.0		mg/L	1	7/3/2013 5:16:05 PM	8218
Chromium	ND	0.0060		mg/L	1	7/3/2013 5:16:05 PM	8218
Silver	ND	0.0050		mg/L	1	7/3/2013 5:16:05 PM	8218
Sodium	320	5.0		mg/L	5	7/3/2013 5:18:46 PM	8218
EPA 200.8: METALS						Analyst: **DBD**	
Arsenic	0.016	0.0010	*	mg/L	1	7/3/2013 12:18:28 PM	8218
Lead	ND	0.0010		mg/L	1	7/3/2013 12:18:28 PM	8218
Selenium	0.0015	0.0010		mg/L	1	7/3/2013 12:18:28 PM	8218
Uranium	ND	0.0010		mg/L	1	7/3/2013 12:18:28 PM	8218
EPA METHOD 245.1: MERCURY						Analyst: **IDC**	
Mercury	ND	0.00020		mg/L	1	7/2/2013 10:30:41 AM	8190
SM5210B: BOD						Analyst: **ECH**	
Biochemical Oxygen Demand	24	2.0	E	mg/L	1	7/1/2013 11:38:00 AM	8098
SM 9223B FECAL INDICATOR: E. COLI MPN						Analyst: **ECH**	
Total Coliform	<1	1.0		CFU/100ml	1	6/26/2013 5:15:00 PM	8108
E. Coli	<1	1.0		CFU/100ml	1	6/26/2013 5:15:00 PM	8108
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Acenaphthylene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Aniline	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Anthracene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Azobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Benz(a)anthracene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Benzo(a)pyrene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Benzo(b)fluoranthene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Benzo(k)fluoranthene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Benzoic acid	ND	20		µg/L	1	7/1/2013 3:33:49 PM	8111
Benzyl alcohol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MW-2
Project: Wingate Ponds
Collection Date: 6/25/2013 10:45:00 AM
Lab ID: 1306A85-002 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Butyl benzyl phthalate	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Carbazole	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4-Chloroaniline	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2-Chloronaphthalene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2-Chlorophenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Chrysene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Di-n-butyl phthalate	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Di-n-octyl phthalate	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Dibenzofuran	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
1,2-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
1,3-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
1,4-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Diethyl phthalate	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Dimethyl phthalate	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2,4-Dichlorophenol	ND	20		µg/L	1	7/1/2013 3:33:49 PM	8111
2,4-Dimethylphenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/1/2013 3:33:49 PM	8111
2,4-Dinitrophenol	ND	20		µg/L	1	7/1/2013 3:33:49 PM	8111
2,4-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2,6-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Fluoranthene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Fluorene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Hexachlorobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Hexachlorobutadiene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Hexachloroethane	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Isophorone	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
1-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2-Methylphenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
3+4-Methylphenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MW-2
Project: Wingate Ponds
Collection Date: 6/25/2013 10:45:00 AM
Lab ID: 1306A85-002 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
N-Nitrosodimethylamine	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Naphthalene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2-Nitroaniline	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
3-Nitroaniline	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4-Nitroaniline	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Nitrobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2-Nitrophenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
4-Nitrophenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Pentachlorophenol	ND	20		µg/L	1	7/1/2013 3:33:49 PM	8111
Phenanthrene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Phenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Pyrene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Pyridine	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/1/2013 3:33:49 PM	8111
Surr: 2,4,6-Tribromophenol	83.5	41.5-117		%REC	1	7/1/2013 3:33:49 PM	8111
Surr: 2-Fluorobiphenyl	86.4	29.1-112		%REC	1	7/1/2013 3:33:49 PM	8111
Surr: 2-Fluorophenol	54.3	11.9-98.6		%REC	1	7/1/2013 3:33:49 PM	8111
Surr: 4-Terphenyl-d14	65.6	46-111		%REC	1	7/1/2013 3:33:49 PM	8111
Surr: Nitrobenzene-d5	92.1	34.9-112		%REC	1	7/1/2013 3:33:49 PM	8111
Surr: Phenol-d5	39.6	17.5-88.3		%REC	1	7/1/2013 3:33:49 PM	8111
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Toluene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Naphthalene	ND	2.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
2-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Acetone	ND	10		µg/L	1	6/28/2013 1:14:57 PM	R11661
Bromobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Bromodichloromethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Bromoform	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Bromomethane	ND	3.0		µg/L	1	6/28/2013 1:14:57 PM	R11661

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MW-2
Project: Wingate Ponds
Collection Date: 6/25/2013 10:45:00 AM
Lab ID: 1306A85-002 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
2-Butanone	ND	10		µg/L	1	6/28/2013 1:14:57 PM	R11661
Carbon disulfide	ND	10		µg/L	1	6/28/2013 1:14:57 PM	R11661
Carbon Tetrachloride	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Chlorobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Chloroethane	ND	2.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Chloroform	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Chloromethane	ND	3.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
2-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
4-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
cis-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Dibromochloromethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Dibromomethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1-Dichloroethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1-Dichloroethene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,3-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
2,2-Dichloropropane	ND	2.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Hexachlorobutadiene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
2-Hexanone	ND	10		µg/L	1	6/28/2013 1:14:57 PM	R11661
Isopropylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
4-Isopropyltoluene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
4-Methyl-2-pentanone	ND	10		µg/L	1	6/28/2013 1:14:57 PM	R11661
Methylene Chloride	ND	3.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
n-Butylbenzene	ND	3.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
n-Propylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
sec-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Styrene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
tert-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
trans-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM-MW-2
Project: Wingate Ponds
Collection Date: 6/25/2013 10:45:00 AM
Lab ID: 1306A85-002
Matrix: AQUEOUS
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Trichlorofluoromethane	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Vinyl chloride	ND	1.0		µg/L	1	6/28/2013 1:14:57 PM	R11661
Xylenes, Total	ND	1.5		µg/L	1	6/28/2013 1:14:57 PM	R11661
Surr: 1,2-Dichloroethane-d4	86.1	70-130		%REC	1	6/28/2013 1:14:57 PM	R11661
Surr: 4-Bromofluorobenzene	104	69.5-130		%REC	1	6/28/2013 1:14:57 PM	R11661
Surr: Dibromofluoromethane	87.9	70-130		%REC	1	6/28/2013 1:14:57 PM	R11661
Surr: Toluene-d8	100	70-130		%REC	1	6/28/2013 1:14:57 PM	R11661
SM4500-H+B: PH						Analyst: **JML**	
pH	8.22	1.68	H	pH units	1	6/26/2013 4:01:23 PM	R11593
SM2320B: ALKALINITY						Analyst: **JML**	
Bicarbonate (As CaCO3)	710	20		mg/L CaCO3	1	6/26/2013 4:01:23 PM	R11593
Carbonate (As CaCO3)	ND	2.0		mg/L CaCO3	1	6/26/2013 4:01:23 PM	R11593
Total Alkalinity (as CaCO3)	710	20		mg/L CaCO3	1	6/26/2013 4:01:23 PM	R11593
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	868	40.0	*	mg/L	1	6/28/2013 3:22:00 PM	8145

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: SW-075167-062513-CM-east po
Project: Wingate Ponds
Collection Date: 6/25/2013 11:35:00 AM
Lab ID: 1306A85-003
Matrix: AQUEOUS
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	6300	1000	*	mg/L	2E	7/1/2013 10:44:25 PM	R11694
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	6/26/2013 9:13:34 PM	R11594
Sulfate	15000	1000	*	mg/L	2E	7/1/2013 10:44:25 PM	R11694
EPA METHOD 200.7: METALS						Analyst: **JLF**	
Barium	0.064	0.0020		mg/L	1	7/3/2013 5:30:19 PM	8218
Cadmium	ND	0.0020		mg/L	1	7/3/2013 5:30:19 PM	8218
Calcium	720	10		mg/L	10	7/5/2013 10:47:52 AM	8218
Chromium	ND	0.0060		mg/L	1	7/3/2013 5:30:19 PM	8218
Silver	ND	0.50		mg/L	100	7/5/2013 10:50:41 AM	8218
Sodium	7900	100		mg/L	100	7/5/2013 10:50:41 AM	8218
EPA 200.8: METALS						Analyst: **DBD**	
Arsenic	0.011	0.010	*	mg/L	10	7/11/2013 1:30:40 PM	8218
Lead	ND	0.010		mg/L	10	7/11/2013 1:30:40 PM	8218
Selenium	0.025	0.010		mg/L	10	7/11/2013 1:30:40 PM	8218
Uranium	0.012	0.010		mg/L	10	7/11/2013 1:30:40 PM	8218
EPA METHOD 245.1: MERCURY						Analyst: **IDC**	
Mercury	ND	0.00020		mg/L	1	7/2/2013 10:32:33 AM	8190
SM5210B: BOD						Analyst: **ECH**	
Biochemical Oxygen Demand	5.1	2.0	E	mg/L	1	7/1/2013 11:38:00 AM	8098
SM 9223B FECAL INDICATOR: E. COLI MPN						Analyst: **ECH**	
Total Coliform	>2419.6	1.0		CFU/100ml	1	6/26/2013 5:15:00 PM	8108
E. Coli	<1	1.0		CFU/100ml	1	6/26/2013 5:15:00 PM	8108
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Acenaphthylene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Aniline	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Anthracene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Azobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Benz(a)anthracene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Benzo(a)pyrene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Benzo(b)fluoranthene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Benzo(k)fluoranthene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Benzoic acid	ND	20		µg/L	1	7/1/2013 4:04:42 PM	8111
Benzyl alcohol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: SW-075167-062513-CM-east po
Project: Wingate Ponds
Collection Date: 6/25/2013 11:35:00 AM
Lab ID: 1306A85-003 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Butyl benzyl phthalate	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Carbazole	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4-Chloroaniline	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2-Chloronaphthalene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2-Chlorophenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Chrysene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Di-n-butyl phthalate	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Di-n-octyl phthalate	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Dibenzofuran	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
1,2-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
1,3-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
1,4-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Diethyl phthalate	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Dimethyl phthalate	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2,4-Dichlorophenol	ND	20		µg/L	1	7/1/2013 4:04:42 PM	8111
2,4-Dimethylphenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/1/2013 4:04:42 PM	8111
2,4-Dinitrophenol	ND	20		µg/L	1	7/1/2013 4:04:42 PM	8111
2,4-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2,6-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Fluoranthene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Fluorene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Hexachlorobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Hexachlorobutadiene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Hexachloroethane	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Isophorone	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
1-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2-Methylphenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
3+4-Methylphenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: SW-075167-062513-CM-east po
Project: Wingate Ponds
Collection Date: 6/25/2013 11:35:00 AM
Lab ID: 1306A85-003 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
N-Nitrosodimethylamine	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Naphthalene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2-Nitroaniline	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
3-Nitroaniline	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4-Nitroaniline	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Nitrobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2-Nitrophenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
4-Nitrophenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Pentachlorophenol	ND	20		µg/L	1	7/1/2013 4:04:42 PM	8111
Phenanthrene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Phenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Pyrene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Pyridine	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/1/2013 4:04:42 PM	8111
Surr: 2,4,6-Tribromophenol	81.3	41.5-117		%REC	1	7/1/2013 4:04:42 PM	8111
Surr: 2-Fluorobiphenyl	75.5	29.1-112		%REC	1	7/1/2013 4:04:42 PM	8111
Surr: 2-Fluorophenol	60.0	11.9-98.6		%REC	1	7/1/2013 4:04:42 PM	8111
Surr: 4-Terphenyl-d14	52.0	46-111		%REC	1	7/1/2013 4:04:42 PM	8111
Surr: Nitrobenzene-d5	81.8	34.9-112		%REC	1	7/1/2013 4:04:42 PM	8111
Surr: Phenol-d5	48.4	17.5-88.3		%REC	1	7/1/2013 4:04:42 PM	8111
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Toluene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Ethylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Naphthalene	ND	4.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1-Methylnaphthalene	ND	8.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
2-Methylnaphthalene	ND	8.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Acetone	ND	20		µg/L	2	6/28/2013 4:10:25 AM	R11625
Bromobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Bromodichloromethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Bromoform	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Bromomethane	ND	6.0		µg/L	2	6/28/2013 4:10:25 AM	R11625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: SW-075167-062513-CM-east po
Project: Wingate Ponds
Collection Date: 6/25/2013 11:35:00 AM
Lab ID: 1306A85-003
Matrix: AQUEOUS
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
2-Butanone	ND	20		µg/L	2	6/28/2013 4:10:25 AM	R11625
Carbon disulfide	ND	20		µg/L	2	6/28/2013 4:10:25 AM	R11625
Carbon Tetrachloride	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Chlorobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Chloroethane	ND	4.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Chloroform	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Chloromethane	ND	6.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
2-Chlorotoluene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
4-Chlorotoluene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
cis-1,2-DCE	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Dibromochloromethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Dibromomethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2-Dichlorobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,3-Dichlorobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,4-Dichlorobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Dichlorodifluoromethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1-Dichloroethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1-Dichloroethene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2-Dichloropropane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,3-Dichloropropane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
2,2-Dichloropropane	ND	4.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1-Dichloropropene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Hexachlorobutadiene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
2-Hexanone	ND	20		µg/L	2	6/28/2013 4:10:25 AM	R11625
Isopropylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
4-Isopropyltoluene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
4-Methyl-2-pentanone	ND	20		µg/L	2	6/28/2013 4:10:25 AM	R11625
Methylene Chloride	ND	6.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
n-Butylbenzene	ND	6.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
n-Propylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
sec-Butylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Styrene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
tert-Butylbenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
trans-1,2-DCE	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: SW-075167-062513-CM-east po
Project: Wingate Ponds
Collection Date: 6/25/2013 11:35:00 AM
Lab ID: 1306A85-003
Matrix: AQUEOUS
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1,1-Trichloroethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,1,2-Trichloroethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Trichloroethene (TCE)	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Trichlorofluoromethane	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
1,2,3-Trichloropropane	ND	4.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Vinyl chloride	ND	2.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Xylenes, Total	ND	3.0		µg/L	2	6/28/2013 4:10:25 AM	R11625
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	2	6/28/2013 4:10:25 AM	R11625
Surr: 4-Bromofluorobenzene	105	69.5-130		%REC	2	6/28/2013 4:10:25 AM	R11625
Surr: Dibromofluoromethane	95.4	70-130		%REC	2	6/28/2013 4:10:25 AM	R11625
Surr: Toluene-d8	92.6	70-130		%REC	2	6/28/2013 4:10:25 AM	R11625
SM4500-H+B: PH						Analyst: **JML**	
pH	9.76	1.68	*H	pH units	1	6/26/2013 4:26:46 PM	R11593
SM2320B: ALKALINITY						Analyst: **JML**	
Bicarbonate (As CaCO3)	39	20		mg/L CaCO3	1	6/26/2013 4:26:46 PM	R11593
Carbonate (As CaCO3)	190	2.0		mg/L CaCO3	1	6/26/2013 4:26:46 PM	R11593
Total Alkalinity (as CaCO3)	230	20		mg/L CaCO3	1	6/26/2013 4:26:46 PM	R11593
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	35800	1000	*	mg/L	1	6/28/2013 3:22:00 PM	8145

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM--WM
Project: Wingate Ponds
Collection Date: 6/25/2013 1:20:00 PM
Lab ID: 1306A85-004 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	21	10		mg/L	20	6/26/2013 9:50:48 PM	R11594
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	6/26/2013 9:38:24 PM	R11594
Sulfate	14	0.50		mg/L	1	6/26/2013 9:38:24 PM	R11594
EPA METHOD 200.7: METALS						Analyst: **JLF**	
Barium	0.14	0.0020		mg/L	1	7/3/2013 5:36:16 PM	8218
Cadmium	ND	0.0020		mg/L	1	7/3/2013 5:36:16 PM	8218
Calcium	28	1.0		mg/L	1	7/3/2013 5:36:16 PM	8218
Chromium	ND	0.0060		mg/L	1	7/3/2013 5:36:16 PM	8218
Silver	ND	0.0050		mg/L	1	7/3/2013 5:36:16 PM	8218
Sodium	170	5.0		mg/L	5	7/3/2013 5:38:47 PM	8218
EPA 200.8: METALS						Analyst: **DBD**	
Arsenic	0.0066	0.0010		mg/L	1	7/3/2013 12:26:51 PM	8218
Lead	ND	0.0010		mg/L	1	7/3/2013 12:26:51 PM	8218
Selenium	0.0016	0.0010		mg/L	1	7/3/2013 12:26:51 PM	8218
Uranium	ND	0.0010		mg/L	1	7/3/2013 12:26:51 PM	8218
EPA METHOD 245.1: MERCURY						Analyst: **IDC**	
Mercury	ND	0.00020		mg/L	1	7/2/2013 10:34:17 AM	8190
SM5210B: BOD						Analyst: **ECH**	
Biochemical Oxygen Demand	5.8	2.0	E	mg/L	1	7/1/2013 11:38:00 AM	8098
SM 9223B FECAL INDICATOR: E. COLI MPN						Analyst: **ECH**	
Total Coliform	<1	1.0		CFU/100ml	1	6/26/2013 5:15:00 PM	8108
E. Coli	<1	1.0		CFU/100ml	1	6/26/2013 5:15:00 PM	8108
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Acenaphthylene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Aniline	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Anthracene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Azobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Benz(a)anthracene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Benzo(a)pyrene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Benzo(b)fluoranthene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Benzo(k)fluoranthene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Benzoic acid	ND	20		µg/L	1	7/1/2013 4:35:40 PM	8111
Benzyl alcohol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM--WM
Project: Wingate Ponds
Collection Date: 6/25/2013 1:20:00 PM
Lab ID: 1306A85-004 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Butyl benzyl phthalate	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Carbazole	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4-Chloroaniline	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2-Chloronaphthalene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2-Chlorophenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Chrysene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Di-n-butyl phthalate	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Di-n-octyl phthalate	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Dibenzofuran	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
1,2-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
1,3-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
1,4-Dichlorobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
3,3´-Dichlorobenzidine	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Diethyl phthalate	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Dimethyl phthalate	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2,4-Dichlorophenol	ND	20		µg/L	1	7/1/2013 4:35:40 PM	8111
2,4-Dimethylphenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/1/2013 4:35:40 PM	8111
2,4-Dinitrophenol	ND	20		µg/L	1	7/1/2013 4:35:40 PM	8111
2,4-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2,6-Dinitrotoluene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Fluoranthene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Fluorene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Hexachlorobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Hexachlorobutadiene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Hexachloroethane	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Isophorone	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
1-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2-Methylnaphthalene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2-Methylphenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
3+4-Methylphenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM--WM
Project: Wingate Ponds
Collection Date: 6/25/2013 1:20:00 PM
Lab ID: 1306A85-004 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
N-Nitrosodimethylamine	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Naphthalene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2-Nitroaniline	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
3-Nitroaniline	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4-Nitroaniline	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Nitrobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2-Nitrophenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
4-Nitrophenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Pentachlorophenol	ND	20		µg/L	1	7/1/2013 4:35:40 PM	8111
Phenanthrene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Phenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Pyrene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Pyridine	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/1/2013 4:35:40 PM	8111
Surr: 2,4,6-Tribromophenol	90.5	41.5-117		%REC	1	7/1/2013 4:35:40 PM	8111
Surr: 2-Fluorobiphenyl	78.0	29.1-112		%REC	1	7/1/2013 4:35:40 PM	8111
Surr: 2-Fluorophenol	55.2	11.9-98.6		%REC	1	7/1/2013 4:35:40 PM	8111
Surr: 4-Terphenyl-d14	59.6	46-111		%REC	1	7/1/2013 4:35:40 PM	8111
Surr: Nitrobenzene-d5	89.4	34.9-112		%REC	1	7/1/2013 4:35:40 PM	8111
Surr: Phenol-d5	35.8	17.5-88.3		%REC	1	7/1/2013 4:35:40 PM	8111
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Toluene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Naphthalene	ND	2.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
2-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Acetone	ND	10		µg/L	1	6/28/2013 5:13:40 AM	R11625
Bromobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Bromodichloromethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Bromoform	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Bromomethane	ND	3.0		µg/L	1	6/28/2013 5:13:40 AM	R11625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM--WM
Project: Wingate Ponds
Collection Date: 6/25/2013 1:20:00 PM
Lab ID: 1306A85-004 **Matrix:** AQUEOUS **Received Date:** 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
2-Butanone	ND	10		µg/L	1	6/28/2013 5:13:40 AM	R11625
Carbon disulfide	ND	10		µg/L	1	6/28/2013 5:13:40 AM	R11625
Carbon Tetrachloride	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Chlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Chloroethane	ND	2.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Chloroform	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Chloromethane	ND	3.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
2-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
4-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
cis-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Dibromochloromethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Dibromomethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1-Dichloroethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1-Dichloroethene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,3-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
2,2-Dichloropropane	ND	2.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Hexachlorobutadiene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
2-Hexanone	ND	10		µg/L	1	6/28/2013 5:13:40 AM	R11625
Isopropylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
4-Isopropyltoluene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
4-Methyl-2-pentanone	ND	10		µg/L	1	6/28/2013 5:13:40 AM	R11625
Methylene Chloride	ND	3.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
n-Butylbenzene	ND	3.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
n-Propylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
sec-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Styrene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
tert-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
trans-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: GW-075167-062513-CM--WM
Project: Wingate Ponds
Collection Date: 6/25/2013 1:20:00 PM
Lab ID: 1306A85-004
Matrix: AQUEOUS
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Trichlorofluoromethane	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Vinyl chloride	ND	1.0		µg/L	1	6/28/2013 5:13:40 AM	R11625
Xylenes, Total	ND	1.5		µg/L	1	6/28/2013 5:13:40 AM	R11625
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	6/28/2013 5:13:40 AM	R11625
Surr: 4-Bromofluorobenzene	103	69.5-130		%REC	1	6/28/2013 5:13:40 AM	R11625
Surr: Dibromofluoromethane	99.4	70-130		%REC	1	6/28/2013 5:13:40 AM	R11625
Surr: Toluene-d8	104	70-130		%REC	1	6/28/2013 5:13:40 AM	R11625
SM4500-H+B: PH						Analyst: **JML**	
pH	7.77	1.68	H	pH units	1	6/26/2013 4:55:20 PM	R11593
SM2320B: ALKALINITY						Analyst: **JML**	
Bicarbonate (As CaCO3)	420	20		mg/L CaCO3	1	6/26/2013 4:55:20 PM	R11593
Carbonate (As CaCO3)	ND	2.0		mg/L CaCO3	1	6/26/2013 4:55:20 PM	R11593
Total Alkalinity (as CaCO3)	420	20		mg/L CaCO3	1	6/26/2013 4:55:20 PM	R11593
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	516	20.0	*	mg/L	1	6/28/2013 3:22:00 PM	8145

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: Trip Blank
Project: Wingate Ponds
Collection Date:
Lab ID: 1306A85-005
Matrix: TRIP BLANK
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Toluene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Naphthalene	ND	2.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
2-Methylnaphthalene	ND	4.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Acetone	ND	10		µg/L	1	6/28/2013 5:45:15 AM	R11625
Bromobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Bromodichloromethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Bromoform	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Bromomethane	ND	3.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
2-Butanone	ND	10		µg/L	1	6/28/2013 5:45:15 AM	R11625
Carbon disulfide	ND	10		µg/L	1	6/28/2013 5:45:15 AM	R11625
Carbon Tetrachloride	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Chlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Chloroethane	ND	2.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Chloroform	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Chloromethane	ND	3.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
2-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
4-Chlorotoluene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
cis-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Dibromochloromethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Dibromomethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1-Dichloroethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1-Dichloroethene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,3-Dichloropropane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
2,2-Dichloropropane	ND	2.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Conoco Phillips
Client Sample ID: Trip Blank
Project: Wingate Ponds
Collection Date:
Lab ID: 1306A85-005
Matrix: TRIP BLANK
Received Date: 6/25/2013 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Hexachlorobutadiene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
2-Hexanone	ND	10		µg/L	1	6/28/2013 5:45:15 AM	R11625
Isopropylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
4-Isopropyltoluene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
4-Methyl-2-pentanone	ND	10		µg/L	1	6/28/2013 5:45:15 AM	R11625
Methylene Chloride	ND	3.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
n-Butylbenzene	ND	3.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
n-Propylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
sec-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Styrene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
tert-Butylbenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
trans-1,2-DCE	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Trichlorofluoromethane	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Vinyl chloride	ND	1.0		µg/L	1	6/28/2013 5:45:15 AM	R11625
Xylenes, Total	ND	1.5		µg/L	1	6/28/2013 5:45:15 AM	R11625
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	1	6/28/2013 5:45:15 AM	R11625
Surr: 4-Bromofluorobenzene	99.3	69.5-130		%REC	1	6/28/2013 5:45:15 AM	R11625
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	6/28/2013 5:45:15 AM	R11625
Surr: Toluene-d8	99.2	70-130		%REC	1	6/28/2013 5:45:15 AM	R11625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

June 29, 2013

ESC Sample # : L643690-01

Date Received : June 27, 2013
Description :

Site ID :

Sample ID : 1306A85-001G GW-075167-062513-CM-MWR-1

Project # :

Collected By :
Collection Date : 06/25/13 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	14.	10.	mg/l	410.4	06/29/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 06/29/13 15:45 Printed: 06/29/13 15:46

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

June 29, 2013

ESC Sample # : L643690-02

Date Received : June 27, 2013
Description :

Site ID :

Sample ID : 1306A85-002G GW-075167-062513-CM-MWR-2

Project # :

Collected By :
Collection Date : 06/25/13 10:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	44.	10.	mg/l	410.4	06/29/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 06/29/13 15:45 Printed: 06/29/13 15:46

ESC
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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

June 29, 2013

ESC Sample # : L643690-03

Date Received : June 27, 2013
Description :

Site ID :

Sample ID : 1306A85-003G GW-075167-062513-CM-E POND

Project # :

Collected By :
Collection Date : 06/25/13 11:35

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	860	10.	mg/l	410.4	06/29/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 06/29/13 15:45 Printed: 06/29/13 15:46

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1-800-767-5859
Fax (615) 758-5859

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Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

June 29, 2013

Date Received : June 27, 2013
Description :

ESC Sample # : L643690-04

Site ID :

Sample ID : 1306A85-004G GW-075167-062513-CM-WMW-3

Project # :

Collected By :
Collection Date : 06/25/13 13:20

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	BDL	10.	mg/l	410.4	06/29/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 06/29/13 15:45 Printed: 06/29/13 15:46

ESC
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Est. 1970

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L643690

June 29, 2013

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
COD	< 10	mg/l			WG669488	06/29/13 13:50

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
COD	mg/l	0	0	0	5	L643690-04	WG669488
COD	mg/l	1200	1200	0	5	L643325-01	WG669488

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
COD	mg/l	183	190.	104.	90-110	WG669488

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
COD	mg/l	195.	190.	106.	90-110	2.60	5	WG669488

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
COD	mg/l	438.	17.0	400	105.	90-110	L643641-01	WG669488

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
COD	mg/l	430.	438.	103.	90-110	1.84	5	L643641-01	WG669488

Batch number /Run number / Sample number cross reference

WG669488: R2727621: L643690-01 02 03 04

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID	**MB-8169**	SampType:	**MBLK**	TestCode:	**EPA Method 200.7: Metals**					
Client ID:	**PBW**	Batch ID:	**8169**	RunNo:	**11702**					
Prep Date:	**7/1/2013**	Analysis Date:	**7/2/2013**	SeqNo:	**332319**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	**LCS-8169**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Metals**					
Client ID:	**LCSW**	Batch ID:	**8169**	RunNo:	**11702**					
Prep Date:	**7/1/2013**	Analysis Date:	**7/2/2013**	SeqNo:	**332320**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Calcium	51	1.0	50.00	0	101	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Silver	0.099	0.0050	0.1000	0	99.3	85	115			
Sodium	50	1.0	50.00	0	101	85	115			

Sample ID	**MB-8218**	SampType:	**MBLK**	TestCode:	**EPA Method 200.7: Metals**					
Client ID:	**PBW**	Batch ID:	**8218**	RunNo:	**11737**					
Prep Date:	**7/3/2013**	Analysis Date:	**7/3/2013**	SeqNo:	**333405**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	**LCS-8218**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Metals**					
Client ID:	**LCSW**	Batch ID:	**8218**	RunNo:	**11737**					
Prep Date:	**7/3/2013**	Analysis Date:	**7/3/2013**	SeqNo:	**333406**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.7	85	115			
Cadmium	0.48	0.0020	0.5000	0	95.5	85	115			
Calcium	48	1.0	50.00	0	95.4	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Silver	0.10	0.0050	0.1000	0	99.5	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**
05-Aug-13

Client: Conoco Phillips
Project: Wingate Ponds

Sample ID	**LCS-8218**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Metals**					
Client ID:	**LCSW**	Batch ID:	**8218**	RunNo:	**11737**					
Prep Date:	**7/3/2013**	Analysis Date:	**7/3/2013**	SeqNo:	**333406**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	47	1.0	50.00	0	94.2	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID	**MB-8169**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Metals**					
Client ID:	**PBW**	Batch ID:	**8169**	RunNo:	**11710**					
Prep Date:	**7/1/2013**	Analysis Date:	**7/2/2013**	SeqNo:	**332646**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	**LLLCS-8169**	SampType:	**LCSLL**	TestCode:	**EPA 200.8: Metals**					
Client ID:	**BatchQC**	Batch ID:	**8169**	RunNo:	**11710**					
Prep Date:	**7/1/2013**	Analysis Date:	**7/2/2013**	SeqNo:	**332649**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.6	85	115			
Lead	0.025	0.0010	0.02500	0	99.5	85	115			
Selenium	0.024	0.0010	0.02500	0	96.2	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID	**LLLCS-8212**	SampType:	**LCSLL**	TestCode:	**EPA 200.8: Metals**					
Client ID:	**BatchQC**	Batch ID:	**8218**	RunNo:	**11728**					
Prep Date:	**7/3/2013**	Analysis Date:	**7/3/2013**	SeqNo:	**333172**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.026	0.0010	0.02500	0	102	85	115			
Selenium	0.025	0.0010	0.02500	0	101	85	115			
Uranium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID	**MB-8218**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Metals**					
Client ID:	**PBW**	Batch ID:	**8218**	RunNo:	**11728**					
Prep Date:	**7/3/2013**	Analysis Date:	**7/3/2013**	SeqNo:	**333173**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID	**MB-8190**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**8190**	RunNo:	**11697**					
Prep Date:	**7/1/2013**	Analysis Date:	**7/2/2013**	SeqNo:	**332227**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-8190**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**LCSW**	Batch ID:	**8190**	RunNo:	**11697**					
Prep Date:	**7/1/2013**	Analysis Date:	**7/2/2013**	SeqNo:	**332228**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	100	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R11594**	RunNo: **11594**
Prep Date:	Analysis Date: **6/26/2013**	SeqNo: **328561** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R11594**	RunNo: **11594**
Prep Date:	Analysis Date: **6/26/2013**	SeqNo: **328562** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.0	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	98.0	90	110			
Sulfate	9.5	0.50	10.00	0	94.6	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R11694**	RunNo: **11694**
Prep Date:	Analysis Date: **7/1/2013**	SeqNo: **331965** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R11694**	RunNo: **11694**
Prep Date:	Analysis Date: **7/1/2013**	SeqNo: **331966** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	91.5	90	110			
Sulfate	9.3	0.50	10.00	0	92.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**
05-Aug-13

Client: Conoco Phillips
Project: Wingate Ponds

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R11625**	RunNo: **11625**
Prep Date:	Analysis Date: **6/27/2013**	SeqNo: **329685** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R11625**	RunNo: **11625**
Prep Date:	Analysis Date: **6/27/2013**	SeqNo: **329685** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.7	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.2	69.5	130			
Surr: Dibromofluoromethane	9.7		10.00		97.0	70	130			
Surr: Toluene-d8	10		10.00		99.8	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R11625**	RunNo: **11625**
Prep Date:	Analysis Date: **6/27/2013**	SeqNo: **329687** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	19	1.0	20.00	0	94.9	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	101	85.8	133			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R11625**	RunNo: **11625**
Prep Date:	Analysis Date: **6/27/2013**	SeqNo: **329687** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	69.5	130			
Surr: Dibromofluoromethane	9.5		10.00		95.3	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R11661**	RunNo: **11661**
Prep Date:	Analysis Date: **6/28/2013**	SeqNo: **330877** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R11661**	RunNo: **11661**
Prep Date:	Analysis Date: **6/28/2013**	SeqNo: **330877** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.7	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.5	69.5	130			
Surr: Dibromofluoromethane	9.2		10.00		91.7	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**
05-Aug-13

Client: Conoco Phillips
Project: Wingate Ponds

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R11661**	RunNo: **11661**
Prep Date:	Analysis Date: **6/28/2013**	SeqNo: **330879** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.8	70	130			
Toluene	18	1.0	20.00	0	92.3	80	120			
Chlorobenzene	19	1.0	20.00	0	94.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	93.6	85.8	133			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.5	69.5	130			
Surr: Dibromofluoromethane	9.1		10.00		91.4	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**
05-Aug-13

Client: Conoco Phillips
Project: Wingate Ponds

Sample ID **mb-8111**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **8111**	RunNo: **11654**
Prep Date: **6/26/2013**	Analysis Date: **6/29/2013**	SeqNo: **330521** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**
05-Aug-13

Client: Conoco Phillips
Project: Wingate Ponds

Sample ID **mb-8111**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **8111**	RunNo: **11654**
Prep Date: **6/26/2013**	Analysis Date: **6/29/2013**	SeqNo: **330521** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	190		200.0		93.4	41.5	117			
Surr: 2-Fluorobiphenyl	100		100.0		101	29.1	112			
Surr: 2-Fluorophenol	120		200.0		58.9	11.9	98.6			
Surr: 4-Terphenyl-d14	75		100.0		75.0	46	111			
Surr: Nitrobenzene-d5	97		100.0		97.1	34.9	112			
Surr: Phenol-d5	87		200.0		43.5	17.5	88.3			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID **lcs-8111**	SampType: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW**	Batch ID: **8111**	RunNo: **11654**
Prep Date: **6/26/2013**	Analysis Date: **6/29/2013**	SeqNo: **330522** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	86	10	100.0	0	85.9	53.3	92.5			
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	55.9	93.9			
2-Chlorophenol	140	10	200.0	0	67.8	51.1	85.8			
1,4-Dichlorobenzene	65	10	100.0	0	65.1	41.5	86.7			
2,4-Dinitrotoluene	120	10	100.0	0	116	57.5	102			S
N-Nitrosodi-n-propylamine	85	10	100.0	0	85.2	52.1	99.7			
4-Nitrophenol	93	10	200.0	0	46.4	27.2	53			
Pentachlorophenol	98	20	200.0	0	49.2	33.7	77.7			
Phenol	77	10	200.0	0	38.4	23.3	66.3			
Pyrene	66	10	100.0	0	66.5	57	88.7			
1,2,4-Trichlorobenzene	73	10	100.0	0	72.7	46.7	87.8			
Surr: 2,4,6-Tribromophenol	180		200.0		87.7	41.5	117			
Surr: 2-Fluorobiphenyl	91		100.0		90.5	29.1	112			
Surr: 2-Fluorophenol	120		200.0		58.0	11.9	98.6			
Surr: 4-Terphenyl-d14	68		100.0		67.8	46	111			
Surr: Nitrobenzene-d5	89		100.0		89.0	34.9	112			
Surr: Phenol-d5	82		200.0		41.1	17.5	88.3			

Sample ID **lcsd-8111**	SampType: **LCSD**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02**	Batch ID: **8111**	RunNo: **11654**
Prep Date: **6/26/2013**	Analysis Date: **6/29/2013**	SeqNo: **330523** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	82	10	100.0	0	82.2	53.3	92.5	4.42	25	
4-Chloro-3-methylphenol	170	10	200.0	0	87.3	55.9	93.9	7.06	32.7	
2-Chlorophenol	140	10	200.0	0	71.1	51.1	85.8	4.81	20	
1,4-Dichlorobenzene	66	10	100.0	0	66.1	41.5	86.7	1.65	20	
2,4-Dinitrotoluene	110	10	100.0	0	108	57.5	102	7.83	29.9	S
N-Nitrosodi-n-propylamine	85	10	100.0	0	84.8	52.1	99.7	0.376	23.1	
4-Nitrophenol	88	10	200.0	0	43.8	27.2	53	5.79	40.5	
Pentachlorophenol	120	20	200.0	0	60.8	33.7	77.7	21.1	37.3	
Phenol	85	10	200.0	0	42.5	23.3	66.3	10.1	20	
Pyrene	66	10	100.0	0	66.2	57	88.7	0.482	26.5	
1,2,4-Trichlorobenzene	72	10	100.0	0	71.6	46.7	87.8	1.61	27.2	
Surr: 2,4,6-Tribromophenol	160		200.0		80.5	41.5	117	0	0	
Surr: 2-Fluorobiphenyl	83		100.0		82.9	29.1	112	0	0	
Surr: 2-Fluorophenol	120		200.0		58.5	11.9	98.6	0	0	
Surr: 4-Terphenyl-d14	69		100.0		68.6	46	111	0	0	
Surr: Nitrobenzene-d5	85		100.0		84.6	34.9	112	0	0	
Surr: Phenol-d5	89		200.0		44.3	17.5	88.3	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID **MB-8098**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **8098**	RunNo: **11683**							
Prep Date: **6/26/2013**	Analysis Date: **7/1/2013**	SeqNo: **331491**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								E

Sample ID **MB--8098**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **8098**	RunNo: **11683**							
Prep Date: **6/26/2013**	Analysis Date: **7/1/2013**	SeqNo: **331492**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								E

Sample ID **LCS-8098**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **8098**	RunNo: **11683**							
Prep Date: **6/26/2013**	Analysis Date: **7/1/2013**	SeqNo: **331493**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	220	2.0	198.0	0	109	84.6	115.4			E

Sample ID **LCSD-8098**	SampType: **LCSD**	TestCode: **SM5210B: BOD**							
Client ID: **LCSS02**	Batch ID: **8098**	RunNo: **11683**							
Prep Date: **6/26/2013**	Analysis Date: **7/1/2013**	SeqNo: **331494**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	210	2.0	198.0	0	105	84.6	115.4	4.25	20	E

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**
05-Aug-13

Client: Conoco Phillips
Project: Wingate Ponds

Sample ID	**MB-8108**	SampType:	**MBLK**	TestCode:	**SM 9223B Fecal Indicator: E. coli MPN**				
Client ID:	**PBW**	Batch ID:	**8108**	RunNo:	**11583**				
Prep Date:	**6/25/2013**	Analysis Date:	**6/26/2013**	SeqNo:	**328211**	Units:	**CFU/100ml**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
E. Coli	<1	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID	**mb-1**	SampType:	**mblk**	TestCode:	**SM2320B: Alkalinity**					
Client ID:	**PBW**	Batch ID:	**R11593**	RunNo:	**11593**					
Prep Date:		Analysis Date:	**6/26/2013**	SeqNo:	**328504**	Units:	**mg/L CaCO3**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20								

Sample ID	**lcs-1**	SampType:	**lcs**	TestCode:	**SM2320B: Alkalinity**					
Client ID:	**LCSW**	Batch ID:	**R11593**	RunNo:	**11593**					
Prep Date:		Analysis Date:	**6/26/2013**	SeqNo:	**328505**	Units:	**mg/L CaCO3**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	80	20	80.00	0	100	90	110			

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306A85**

05-Aug-13

Client: Conoco Phillips

Project: Wingate Ponds

Sample ID	**MB-8145**	SampType:	**MBLK**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**PBW**	Batch ID:	**8145**	RunNo:	**11644**					
Prep Date:	**6/27/2013**	Analysis Date:	**6/28/2013**	SeqNo:	**330395**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	**LCS-8145**	SampType:	**LCS**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**LCSW**	Batch ID:	**8145**	RunNo:	**11644**					
Prep Date:	**6/27/2013**	Analysis Date:	**6/28/2013**	SeqNo:	**330396**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Conoco ABQ | Work Order Number: 1306A85 | RcptNo: 1

Received by/date: MA 06/25/13

Logged By: **Michelle Garcia** 6/25/2013 4:10:00 PM Michelle Garcia

Completed By: **Michelle Garcia** 6/25/2013 4:30:49 PM Michelle Garcia

Reviewed By: JRO 06/26/13

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: 12 (<2 or >12 unless noted)

Adjusted? NO

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Not Present			

Chain-of-Custody Record

Client: CRA for Conoco Phillips

Mailing Address: 6121 Indian School #200 ABQ, NM 87110

Phone #: 505-884-0672

email or Fax#: CMatthews@craworld.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Wingate Ponds

Project #: 075167

Project Manager: Kelly Blanchard

Sampler: Christine Mathews

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1306A85	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BOD & COD	Metals & Mercury	Alkalinity, pH, TDS, Anions	Total Coliform E. Coli Enumeration	Air Bubbles (Y or N)
6/25/13	0900	H_2O	GW-075167-062513-CM-MWR-1	10	HCl, Nitric, Sulfuric	-001										X	X	X	X	X	X	
6/25/13	1045	H_2O	GW-075167-062513-CM-MW-2	10	HCl, Nitric, Sulfuric	-002										X	X	X	X	X	X	
6/25/13	1135	H_2O	GW-075167-062513-CM-east pond	10	HCl, Nitric, Sulfuric	-003										X	X	X	X	X	X	
6/25/13	1320	H_2O	GW-075167-062513-CM-MWW-3	10	HCl, Nitric, Sulfuric	-004										X	X	X	X	X	X	

Date	Time	Relinquished by:	Received by:	Date	Time
6/25/13	1400			6-25-13	14:05
6/25/13	16:10			06/25/13	16:10

Remarks:
Metals
200.7 - Ba, Cd, Cr, Ag, Ca, Na
200.8 - As, Pb, Se, U
~~Anions~~

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.