



November 7, 2019

Ms. Olivia Yu
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

**Re: 2018 Annual Groundwater Monitoring and Remedial Activities Report
ConocoPhillips, Maljamar E&P
Lea County, New Mexico (AP-115-1)**

Ms. Yu:

This report details the continuing groundwater monitoring and remedial activities at the ConocoPhillips Company (COP) Maljamar E&P, Lea County, New Mexico (site). The Site is located in Lea County, New Mexico (Sec 21, T17S, R32E); the site location is shown on Figures 1 and 2. The site was assigned the identifier order number AP-115-1 by the New Mexico Oil Conservation District (NMOCD).

1.0 BACKGROUND

On July 6, 2006, a release of approximately 23 barrels of produced water was discovered. The release flowed into a drainage way west of the MCA Battery 2 and affected an area approximately 750 feet long and 30 feet wide (Site). Previous investigative and remedial activities were conducted at the Site during the Maljamar Gas Plant investigation. Groundwater samples and water level data were collected, surface and borehole geophysical surveys were performed, and an aquifer pump test was performed.

On October 17, 2014, a letter was submitted to the NMOCD listing wells that would be managed by COP following the split of ConocoPhillips upstream and downstream assets. Groundwater monitoring wells managed as part of this Site included MW-11, MW-12, MW-13, MW-14, and MW-19 and extraction well EW-1. Furthermore, MW-18 and MW-20 were noted to be well south of and unrelated to the Site and would no longer be monitored. A map of the extraction and monitor wells is shown in Figure 3.

2.0 PREVIOUS INVESTIGATIONS

A groundwater injection well, EW-1, was installed in June 2007 adjacent to monitor well MW-12, and extraction well EW-2 was installed in September 2017. The extracted groundwater is pumped into a flowline connected to an off-site 210 barrel tank and transported to the MCA Unit Battery #2.

Tetra Tech

901 West Wall Street, Suite 100, Midland, TX 79701
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Historical groundwater analytical results have documented concentrations of chloride, nitrate, sulfate, and total dissolved solids (TDS) above the applicable New Mexico Water Quality Control Commission (NMWQCC) standards in samples collected from EW-1, MW-11, MW-12, MW-13, and MW-14.

3.0 HYDROLOGY/GROUNDWATER

The water bearing zone consists of the Pliocene-age Ogallala aquifer under unconfined conditions at the site. The Ogallala aquifer is located at the base of the Ogallala Formation. In general, the Ogallala Formation consists of quartz sand and gravel that is poorly to well-cemented with calcium carbonate and contains minor amounts of clay. The wells installed at the site were drilled to depths of approximately 120 feet bgs with static groundwater water levels approximately 90 feet bgs.

4.0 2018 GROUNDWATER MONITORING

4.1 Groundwater Sampling and Analysis

Prior to purging the wells, each well was gauged to measure the depth to groundwater and phase separated hydrocarbons (PSH), if any. The water levels and the PSH measurements are summarized in Table 1. The annual groundwater monitoring event occurred August 16, 2018. No PSH was identified in the wells during the August 2018 event. All wells were sampled except EW-2, which was not sampled because of the pump located in the well. Each well was sampled utilizing low flow sampling techniques.

Groundwater samples were collected and analyzed for total dissolved solids (TDS) by SM Method 2540C and bromide, chloride, and sulfate by EPA Method 300.0. Groundwater samples were transported to Pace Analytical Services, LLC, in Allen, TX under chain-of-custody control for the 2018 sampling event. Table 2 presents a summary of the groundwater analyses, chloride concentration trend graphs are presented in Appendix A, and the analytical report and chain-of-custody are presented in Appendix B.

4.2 Groundwater Gradient

A water table map was generated for the August 2018 sampling event. The hydraulic gradient for the aquifer was generally to the northeast, and consistent with historical data. The August 2018 groundwater gradient map is included as Figure 4.

4.3 Phase Separated Hydrocarbon (PSH)

The wells were gauged for the presence of PSH during the groundwater sampling event. The wells contained no measurable PSH.



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5.0 GROUNDWATER ANALYTICAL RESULTS

5.1 August 2018 Sampling Event

During the August 2018 monitoring event, MW-11, MW-12, MW-13, MW-14, MW-19, and EW-1 were sampled. The concentration of chlorides in MW-11 (879 mg/L) and MW-12 (37,300 mg/L), the concentration of sulfate in MW-12 (1,430 mg/L) and MW-14 (923 mg/L), and the concentration of TDS in MW-11, MW-12, MW-13, and MW-14 exceeded the applicable NMWQCC standards. No exceedances were found in MW-19. Chloride concentrations appear to be stable or decreasing in all of the sampled wells.

6.0 WORK PLAN

6.1 Groundwater Monitoring

Groundwater monitoring and sampling of the monitoring wells will be continued on an annual basis, with annual reporting to the New Mexico Conservation Division.

If you have any questions please call me at (432) 258-3451.

Sincerely,
Tetra Tech, Inc.

A handwritten signature in blue ink that reads 'Julie Evans'.

Julie Evans
Project Manager

Reviewed By:

A handwritten signature in blue ink that appears to read 'Greg W. Pope'.

Greg W. Pope, P.G.
Program Manager

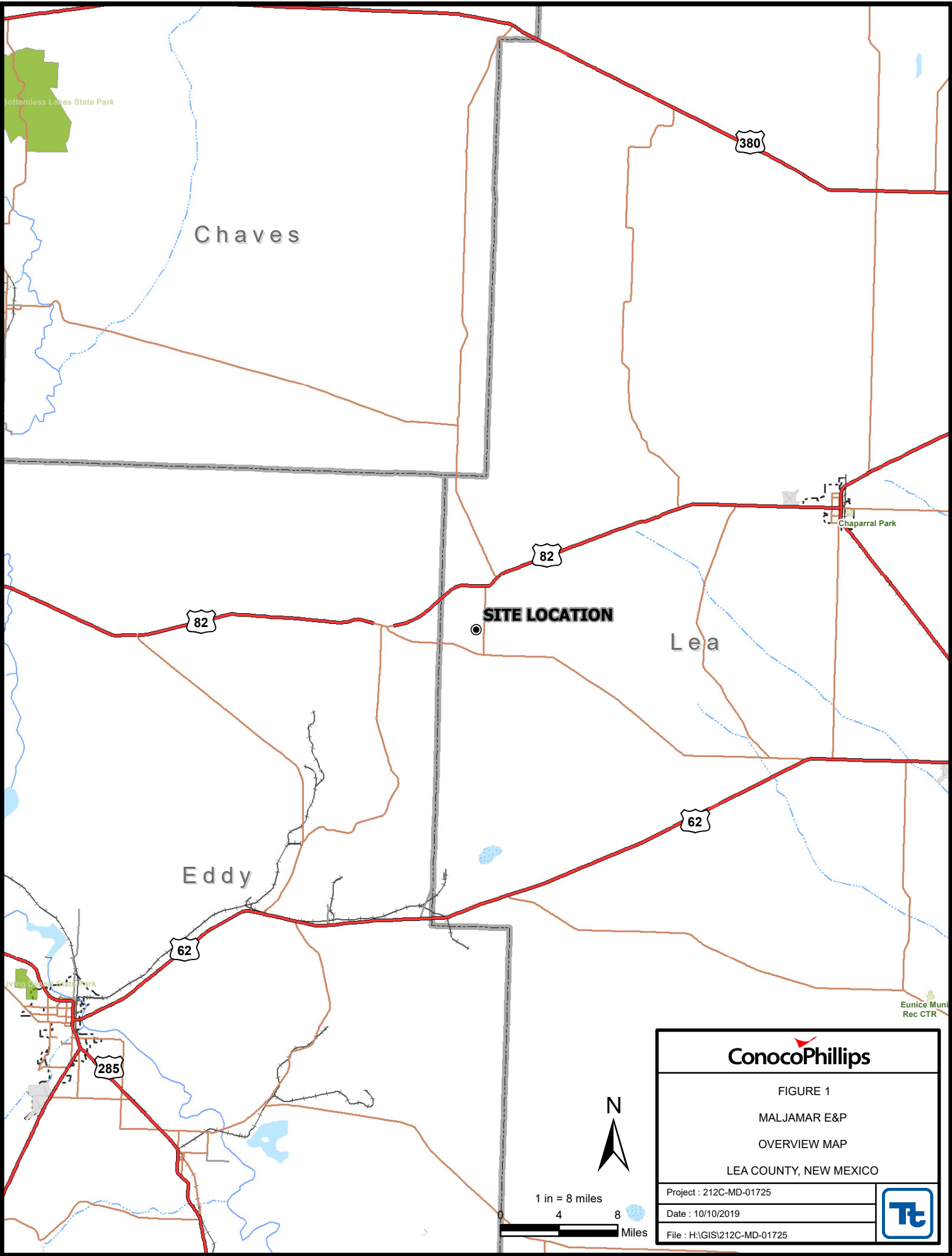
cc: Ms. Jenni Fortunato – ConocoPhillips

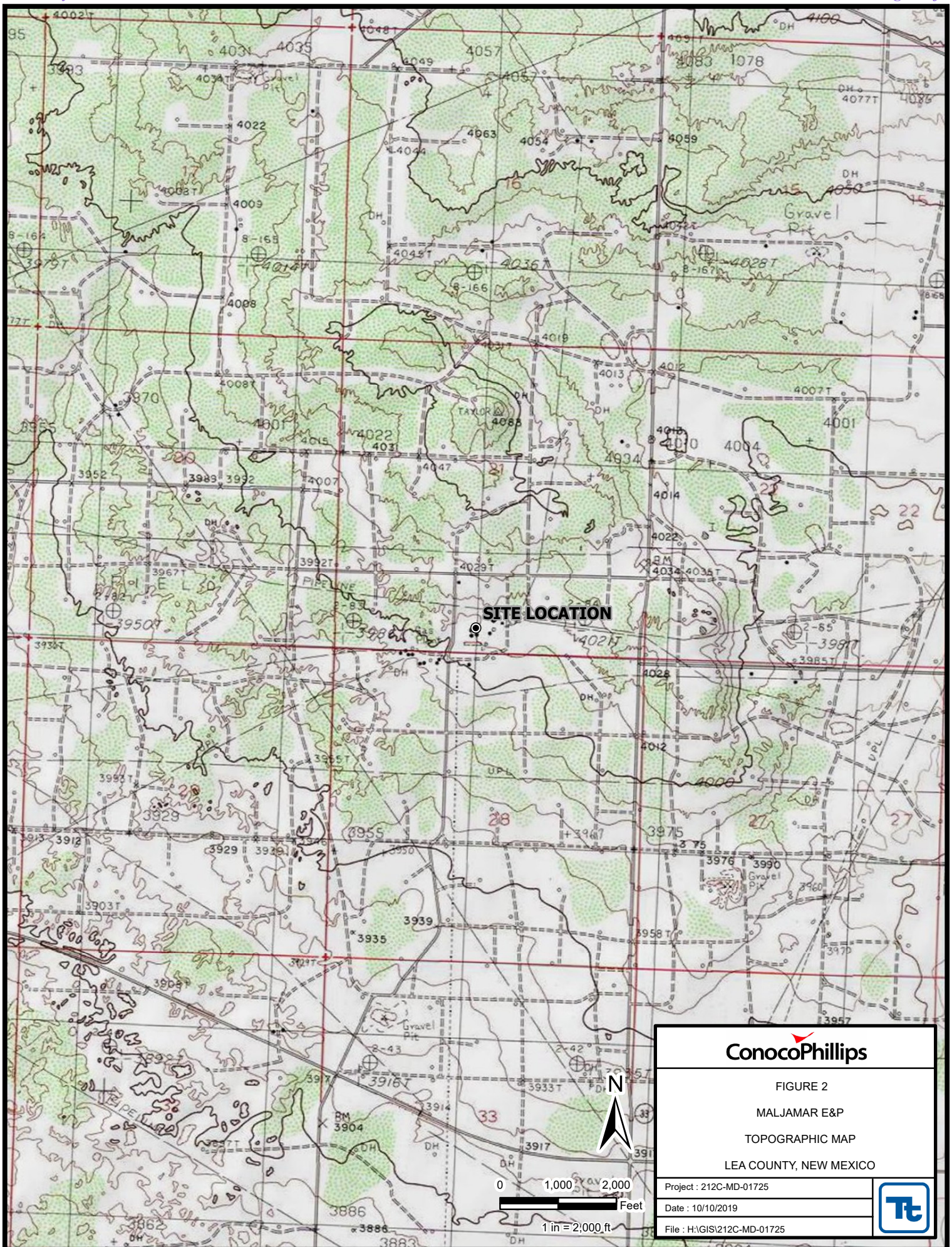
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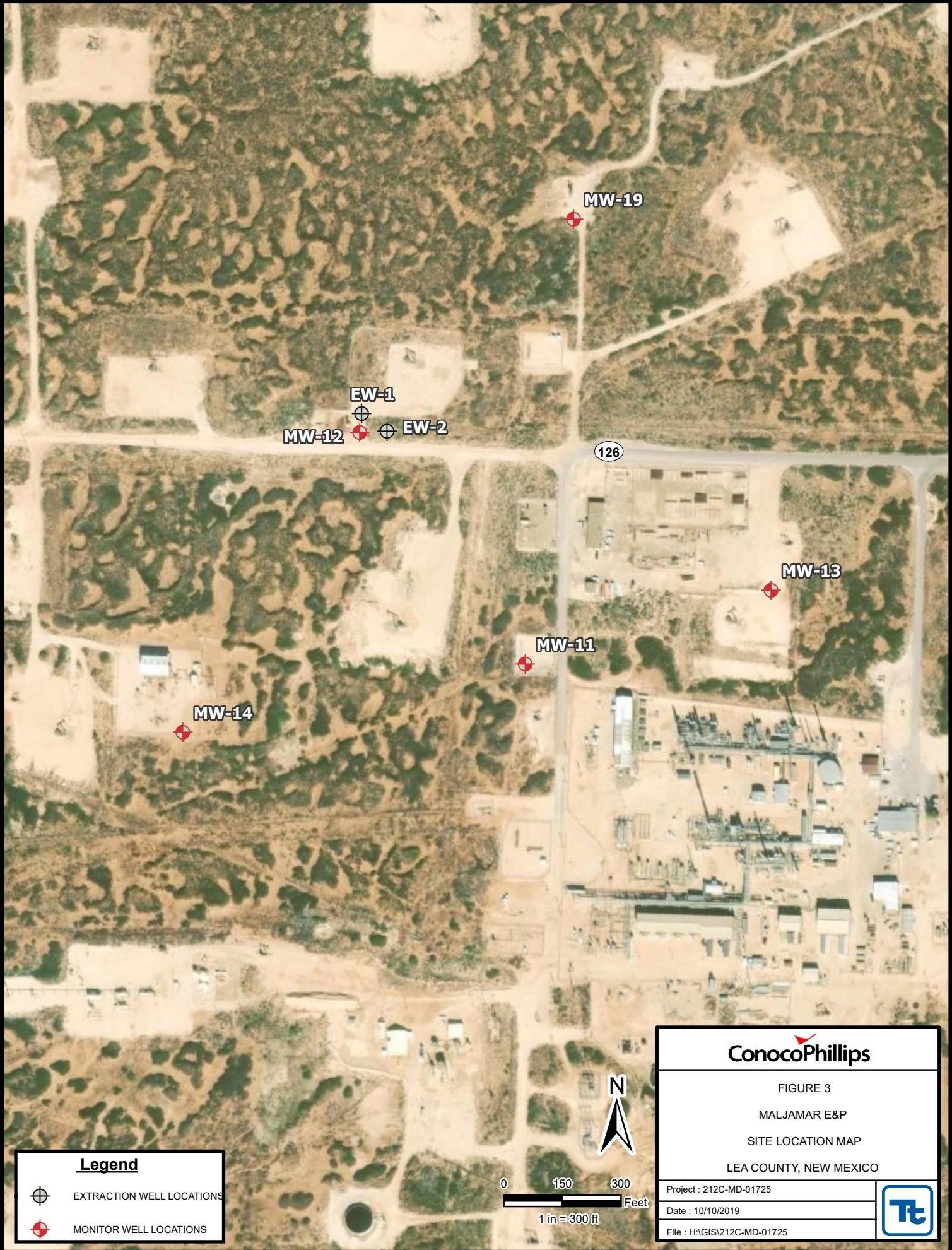
- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Site Plan Map
- Figure 4 – Groundwater Gradient Map – August 16, 2018
- Table 1 – Summary of Groundwater Elevations and PSH Thickness
- Table 2 – Summary of Groundwater Analytical Data
- Appendix A – Chloride Concentration Trend Graphs
- Appendix B – Laboratory Analytical Data

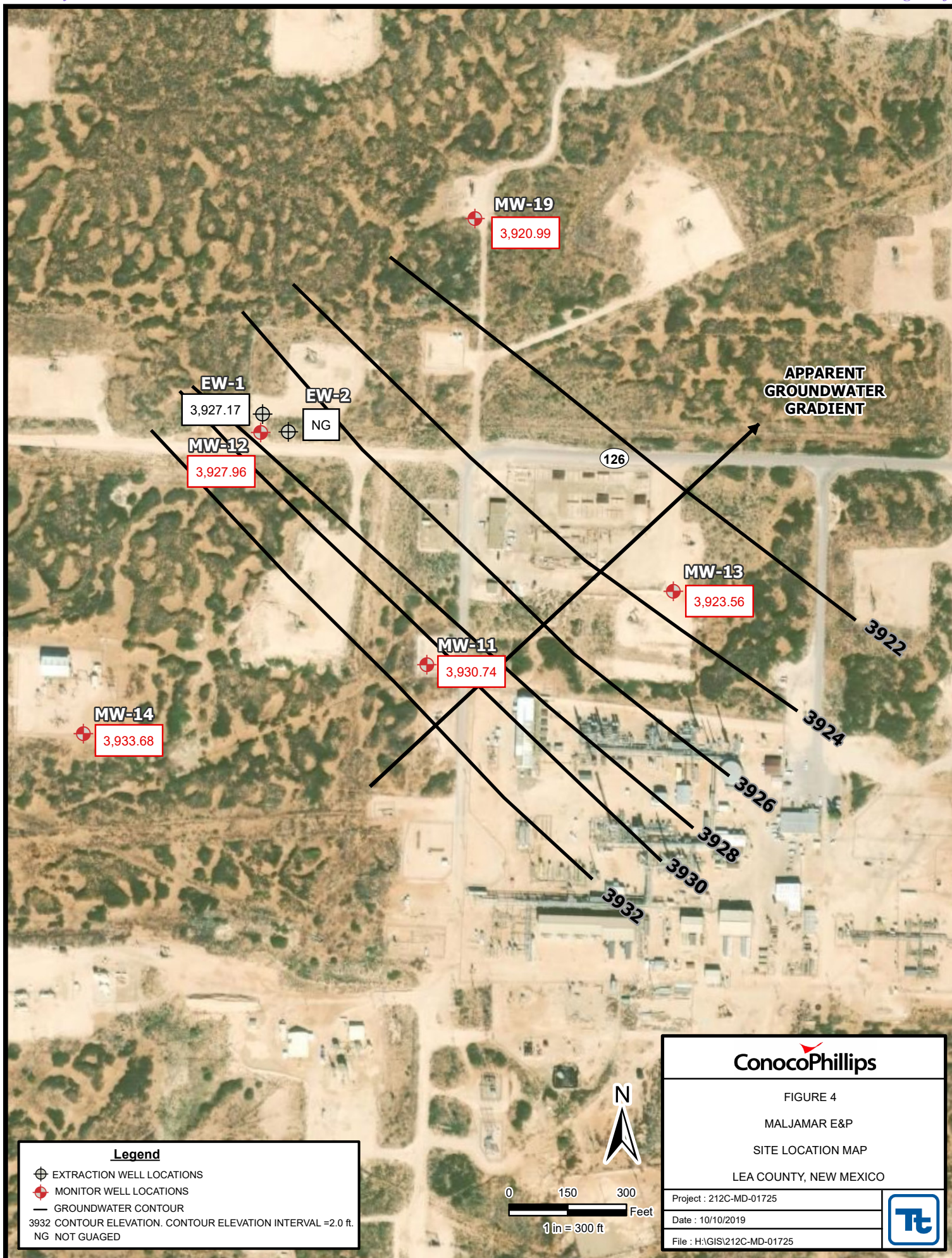


FIGURES











TABLES

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
EW-1	6/27/2007	-	-	92.58	-	-	4,022.04	3,929.46
	7/19/2007	-	-	93.27	-	-	4,022.04	3,928.77
	10/24/2011	-	-	96.44	-	-	4,022.04	3,925.60
	8/3/2017	125	-	NG	-	-	4,022.04	NG
	8/16/2018	-	-	94.87	-	-	4,022.04	3,927.17
EW-2	10/4/2017	140	-	95.04	-	-	4,022.76	3,927.72
	8/16/2018	-	-	NG	-	-	4,022.76	NG
MW-11	12/13/2001	-	-	81.38	v	-	4,015.54	3,934.16
	3/22/2002	-	-	83.60	-	-	4,015.54	3,931.94
	9/16/2002	-	-	83.82	-	-	4,015.54	3,931.72
	9/20/2002	-	-	83.70	-	-	4,015.54	3,931.84
	9/4/2003	-	-	84.50	-	-	4,015.54	3,931.04
	4/5/2004	-	-	84.54	-	-	4,015.54	3,931.00
	5/17/2004	-	-	84.64	-	-	4,015.54	3,930.90
	5/24/2004	-	-	84.55	-	-	4,015.54	3,930.99
	6/1/2004	-	-	84.61	-	-	4,015.54	3,930.93
	6/7/2004	-	-	84.58	-	-	4,015.54	3,930.96
	6/15/2004	-	-	84.69	-	-	4,015.54	3,930.85
	6/21/2004	-	-	84.72	-	-	4,015.54	3,930.82
	6/28/2004	-	-	84.99	-	-	4,015.54	3,930.55
	7/6/2004	-	-	84.83	-	-	4,015.54	3,930.71
	7/12/2004	-	-	84.96	-	-	4,015.54	3,930.58
	7/19/2004	-	-	84.90	-	-	4,015.54	3,930.64
	7/26/2004	-	-	85.11	-	-	4,015.54	3,930.43
	8/2/2004	-	-	84.96	-	-	4,015.54	3,930.58
	8/10/2004	-	-	85.09	-	-	4,015.54	3,930.45
	8/16/2004	-	-	85.06	-	-	4,015.54	3,930.48
	8/23/2004	-	-	84.83	-	-	4,015.54	3,930.71
	8/30/2004	-	-	85.06	-	-	4,015.54	3,930.48
	9/8/2004	-	-	85.14	-	-	4,015.54	3,930.40
	10/8/2004	-	-	85.12	-	-	4,015.54	3,930.42
	12/30/2004	-	-	85.12	-	-	4,015.54	3,930.42
	1/17/2005	-	-	85.52	-	-	4,015.54	3,930.02
	2/9/2005	-	-	85.33	-	-	4,015.54	3,930.21
	3/9/2005	-	-	85.45	-	-	4,015.54	3,930.09
	4/5/2005	-	-	85.15	-	-	4,015.54	3,930.39
	5/10/2005	-	-	85.21	-	-	4,015.54	3,930.33
	6/8/2005	-	-	85.31	-	-	4,015.54	3,930.23
	7/5/2005	-	-	85.59	-	-	4,015.54	3,929.95
	8/8/2005	-	-	85.50	-	-	4,015.54	3,930.04
	9/14/2005	-	-	85.42	-	-	4,015.54	3,930.12
	10/12/2005	-	-	85.54	-	-	4,015.54	3,930.00
	11/9/2005	-	-	85.62	-	-	4,015.54	3,929.92
	12/14/2005	-	-	85.41	-	-	4,015.54	3,930.13
	1/12/2006	-	-	85.26	-	-	4,015.54	3,930.28
	2/2/2006	-	-	85.23	-	-	4,015.54	3,930.31
	3/7/2006	-	-	85.44	-	-	4,015.54	3,930.10
	4/5/2006	-	-	85.38	-	-	4,015.54	3,930.16
	5/8/2006	-	-	85.33	-	-	4,015.54	3,930.21
	6/5/2006	-	-	85.47	-	-	4,015.54	3,930.07
	7/11/2006	-	-	85.48	-	-	4,015.54	3,930.06
	8/16/2006	-	-	85.52	-	-	4,015.54	3,930.02
	9/7/2006	-	-	85.43	-	-	4,015.54	3,930.11
	10/11/2006	-	-	85.41	-	-	4,015.54	3,930.13
	11/8/2006	-	-	85.31	-	-	4,015.54	3,930.23
	12/4/2006	-	-	85.88	-	-	4,015.54	3,929.66
	1/4/2007	-	-	85.20	-	-	4,015.54	3,930.34
	2/27/2007	-	-	85.16	-	-	4,015.54	3,930.38
	3/20/2007	-	-	85.33	-	-	4,015.54	3,930.21
	4/17/2007	-	-	85.17	-	-	4,015.54	3,930.37
	5/7/2007	-	-	85.40	-	-	4,015.54	3,930.14
	6/27/2007	-	-	85.27	-	-	4,015.54	3,930.27
	7/19/2007	-	-	85.13	-	-	4,015.54	3,930.41
	8/21/2007	-	-	85.08	-	-	4,015.54	3,930.46
	9/17/2007	-	-	85.05	-	-	4,015.54	3,930.49
	10/16/2007	-	-	84.97	-	-	4,015.54	3,930.57
	11/20/2007	-	-	85.02	-	-	4,015.54	3,930.52
	12/21/2007	-	-	84.81	-	-	4,015.54	3,930.73
	1/22/2008	-	-	85.27	-	-	4,015.54	3,930.27
	2/27/2008	-	-	85.20	-	-	4,015.54	3,930.34
	3/25/2008	-	-	84.99	-	-	4,015.54	3,930.55
	4/29/2008	-	-	84.98	-	-	4,015.54	3,930.56
	5/5/2008	-	-	84.93	-	-	4,015.54	3,930.61
	6/10/2008	-	-	84.94	-	-	4,015.54	3,930.60
	7/15/2008	-	-	84.90	-	-	4,015.54	3,930.64
	8/19/2008	-	-	84.88	-	-	4,015.54	3,930.66
	9/16/2008	-	-	85.13	-	-	4,015.54	3,930.41
	10/15/2008	-	-	85.03	-	-	4,015.54	3,930.51
	11/12/2008	-	-	84.72	-	-	4,015.54	3,930.82

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MW-11 cont.	12/11/2008	-	-	84.92	-	-	4,015.54	3,930.62
	1/13/2009	-	-	85.15	-	-	4,015.54	3,930.39
	2/11/2009	-	-	84.85	-	-	4,015.54	3,930.69
	3/10/2009	-	-	84.63	-	-	4,015.54	3,930.91
	4/13/2009	-	-	84.79	-	-	4,015.54	3,930.75
	5/1/2009	-	-	84.64	-	-	4,015.54	3,930.90
	6/8/2009	-	-	84.51	-	-	4,015.54	3,931.03
	7/13/2009	-	-	84.61	-	-	4,015.54	3,930.93
	8/10/2009	-	-	84.60	-	-	4,015.54	3,930.94
	9/15/2009	-	-	84.44	-	-	4,015.54	3,931.10
	10/6/2009	-	-	84.34	-	-	4,015.54	3,931.20
	11/9/2009	-	-	84.58	-	-	4,015.54	3,930.96
	12/23/2009	-	-	84.06	-	-	4,015.54	3,931.48
	1/20/2010	-	-	83.99	-	-	4,015.54	3,931.55
	2/9/2010	-	-	84.64	-	-	4,015.54	3,930.90
	3/9/2010	-	-	84.23	-	-	4,015.54	3,931.31
	4/12/2010	-	-	84.54	-	-	4,015.54	3,931.00
	5/24/2010	-	-	84.34	-	-	4,015.54	3,931.20
	6/14/2010	-	-	84.48	-	-	4,015.54	3,931.06
	7/20/2010	-	-	84.54	-	-	4,015.54	3,931.00
	8/11/2010	-	-	84.57	-	-	4,015.54	3,930.97
	9/21/2010	-	-	84.56	-	-	4,015.54	3,930.98
	10/20/2010	-	-	84.62	-	-	4,015.54	3,930.92
	11/8/2010	-	-	84.48	-	-	4,015.54	3,931.06
	12/7/2010	-	-	84.58	-	-	4,015.54	3,930.96
	1/18/2011	-	-	84.61	-	-	4,015.54	3,930.93
	2/8/2011	-	-	84.38	-	-	4,015.54	3,931.16
	3/8/2011	-	-	84.40	-	-	4,015.54	3,931.14
	4/13/2011	-	-	84.61	-	-	4,015.54	3,930.93
	5/23/2011	-	-	84.54	-	-	4,015.54	3,931.00
	6/28/2011	-	-	84.85	-	-	4,015.54	3,930.69
	7/19/2011	-	-	84.73	-	-	4,015.54	3,930.81
	8/31/2011	-	-	84.61	-	-	4,015.54	3,930.93
	9/27/2011	-	-	84.66	-	-	4,015.54	3,930.88
	10/24/2011	-	-	84.79	-	-	4,015.54	3,930.75
	11/29/2011	-	-	84.99	-	-	4,015.54	3,930.55
	12/23/2011	-	-	84.83	-	-	4,015.54	3,930.71
	1/31/2012	-	-	84.77	-	-	4,015.54	3,930.77
	2/29/2012	-	-	84.81	-	-	4,015.54	3,930.73
	3/27/2012	-	-	84.85	-	-	4,015.54	3,930.69
	4/18/2012	-	-	84.91	-	-	4,015.54	3,930.63
	5/21/2012	-	-	85.15	-	-	4,015.54	3,930.39
	7/17/2012	-	-	84.97	-	-	4,015.54	3,930.57
	8/21/2012	-	-	84.97	-	-	4,015.54	3,930.57
	9/17/2012	-	-	84.83	-	-	4,015.54	3,930.71
	12/13/2012	-	-	85.15	-	-	4,015.54	3,930.39
	1/9/2013	-	-	85.24	-	-	4,015.54	3,930.30
	2/6/2013	-	-	85.03	-	-	4,015.54	3,930.51
	3/6/2013	-	-	85.33	-	-	4,015.54	3,930.21
	5/1/2013	-	-	85.11	-	-	4,015.54	3,930.43
	6/5/2013	-	-	85.29	-	-	4,015.54	3,930.25
	7/3/2013	-	-	85.51	-	-	4,015.54	3,930.03
	7/30/2013	-	-	85.55	-	-	4,015.54	3,929.99
	8/15/2013	-	-	85.58	-	-	4,015.54	3,929.96
	10/2/2013	-	-	85.50	-	-	4,015.54	3,930.04
	12/23/2013	-	-	85.86	-	-	4,015.54	3,929.68
	1/9/2014	-	-	85.46	-	-	4,015.54	3,930.08
	2/12/2014	-	-	85.73	-	-	4,015.54	3,929.81
	3/19/2014	-	-	85.85	-	-	4,015.54	3,929.69
	4/3/2014	-	-	85.46	-	-	4,015.54	3,930.08
	5/7/2014	-	-	85.46	-	-	4,015.54	3,930.08
	6/5/2014	-	-	85.54	-	-	4,015.54	3,930.00
	7/1/2014	-	-	85.76	-	-	4,015.54	3,929.78
	7/22/2014	-	-	85.90	-	-	4,015.54	3,929.64
	8/5/2014	-	-	85.88	-	-	4,015.54	3,929.66
	9/4/2014	-	-	85.73	-	-	4,015.54	3,929.81
	10/2/2014	-	-	85.77	-	-	4,015.54	3,929.77
	11/6/2014	-	-	86.22	-	-	4,015.54	3,929.32
	12/4/2014	-	-	85.79	-	-	4,015.54	3,929.75
	8/24/2015	-	-	86.21	-	-	4,015.54	3,929.33
	1/20/2016	-	-	85.91	-	-	4,015.54	3,929.63
	2/16/2016	-	-	85.94	-	-	4,015.54	3,929.60
	3/15/2016	-	-	85.86	-	-	4,015.54	3,929.68
	4/20/2016	-	-	85.90	-	-	4,015.54	3,929.64
	5/17/2016	-	-	86.00	-	-	4,015.54	3,929.54
	8/16/2016	-	-	85.85	-	-	4,015.54	3,929.69
	9/20/2016	-	-	85.75	-	-	4,015.54	3,929.79
	10/18/2016	-	-	85.56	-	-	4,015.54	3,929.98
	12/20/2016	-	-	85.82	-	-	4,015.54	3,929.72
	8/3/2017	120	-	86.32	-	-	4,015.54	3,929.22
	8/16/2018	-	-	84.80	-	-	4,015.54	3,930.74

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-12	12/13/2001	-	-	91.43	-	-	4,022.71	3,931.28
	3/22/2002	-	-	94.38	-	-	4,022.71	3,928.33
	9/16/2002	-	-	94.51	-	-	4,022.71	3,928.20
	9/20/2002	-	-	94.31	-	-	4,022.71	3,928.40
	4/5/2004	-	-	94.59	-	-	4,022.71	3,928.12
	5/17/2004	-	-	94.60	-	-	4,022.71	3,928.11
	5/24/2004	-	-	94.51	-	-	4,022.71	3,928.20
	6/1/2004	-	-	94.53	-	-	4,022.71	3,928.18
	6/7/2004	-	-	94.45	-	-	4,022.71	3,928.26
	6/15/2004	-	-	94.56	-	-	4,022.71	3,928.15
	6/21/2004	-	-	94.57	-	-	4,022.71	3,928.14
	6/28/2004	-	-	94.84	-	-	4,022.71	3,927.87
	7/6/2004	-	-	94.70	-	-	4,022.71	3,928.01
	7/12/2004	-	-	94.80	-	-	4,022.71	3,927.91
	7/19/2004	-	-	94.74	-	-	4,022.71	3,927.97
	7/26/2004	-	-	94.92	-	-	4,022.71	3,927.79
	8/2/2004	-	-	94.77	-	-	4,022.71	3,927.94
	8/10/2004	-	-	94.88	-	-	4,022.71	3,927.83
	8/16/2004	-	-	94.86	-	-	4,022.71	3,927.85
	8/23/2004	-	-	94.60	-	-	4,022.71	3,928.11
	8/30/2004	-	-	94.82	-	-	4,022.71	3,927.89
	9/8/2004	-	-	94.89	-	-	4,022.71	3,927.82
	10/8/2004	-	-	94.83	-	-	4,022.71	3,927.88
	12/30/2004	-	-	94.72	-	-	4,022.71	3,927.99
	1/17/2005	-	-	95.06	-	-	4,022.71	3,927.65
	2/9/2005	-	-	94.94	-	-	4,022.71	3,927.77
	3/9/2005	-	-	94.92	-	-	4,022.71	3,927.79
	4/5/2005	-	-	94.58	-	-	4,022.71	3,928.13
	5/10/2005	-	-	94.61	-	-	4,022.71	3,928.10
	6/8/2005	-	-	94.58	-	-	4,022.71	3,928.13
	7/5/2005	-	-	94.84	-	-	4,022.71	3,927.87
	8/8/2005	-	-	94.78	-	-	4,022.71	3,927.93
	9/14/2005	-	-	94.71	-	-	4,022.71	3,928.00
	10/12/2005	-	-	94.82	-	-	4,022.71	3,927.89
	11/9/2005	-	-	94.92	-	-	4,022.71	3,927.79
	12/14/2005	-	-	94.70	-	-	4,022.71	3,928.01
	1/12/2006	-	-	94.50	-	-	4,022.71	3,928.21
	2/2/2006	-	-	94.58	-	-	4,022.71	3,928.13
	3/7/2006	-	-	94.76	-	-	4,022.71	3,927.95
	4/5/2006	-	-	94.67	-	-	4,022.71	3,928.04
	5/8/2006	-	-	94.61	-	-	4,022.71	3,928.10
	6/5/2006	-	-	94.77	-	-	4,022.71	3,927.94
	7/11/2006	-	-	94.84	-	-	4,022.71	3,927.87
	8/16/2006	-	-	94.93	-	-	4,022.71	3,927.78
	9/7/2006	-	-	94.86	-	-	4,022.71	3,927.85
	10/11/2006	-	-	94.86	-	-	4,022.71	3,927.85
	11/8/2006	-	-	94.72	-	-	4,022.71	3,927.99
	12/4/2006	-	-	95.35	-	-	4,022.71	3,927.36
	1/4/2007	-	-	94.68	-	-	4,022.71	3,928.03
	2/27/2007	-	-	94.73	-	-	4,022.71	3,927.98
	3/20/2007	-	-	94.93	-	-	4,022.71	3,927.78
	4/17/2007	-	-	94.73	-	-	4,022.71	3,927.98
	5/7/2007	-	-	94.95	-	-	4,022.71	3,927.76
	6/27/2007	-	-	94.42	-	-	4,022.71	3,928.29
	7/19/2007	-	-	94.71	-	-	4,022.71	3,928.00
	8/21/2007	-	-	94.77	-	-	4,022.71	3,927.94
	9/17/2007	-	-	94.90	-	-	4,022.71	3,927.81
	10/16/2007	-	-	98.83	-	-	4,022.71	3,923.88
	11/20/2007	-	-	99.07	-	-	4,022.71	3,923.64
	12/21/2007	-	-	98.82	-	-	4,022.53	3,923.71
	1/22/2008	-	-	97.14	-	-	4,022.53	3,925.39
	2/27/2008	-	-	97.32	-	-	4,022.53	3,925.21
	3/25/2008	-	-	98.91	-	-	4,022.53	3,923.62
	4/29/2008	-	-	98.87	-	-	4,022.53	3,923.66
	5/5/2008	-	-	98.82	-	-	4,022.53	3,923.71
	6/10/2008	-	-	98.63	-	-	4,022.53	3,923.90
	7/15/2008	-	-	98.65	-	-	4,022.53	3,923.88
	8/19/2008	-	-	98.43	-	-	4,022.53	3,924.10
	9/16/2008	-	-	98.92	-	-	4,022.53	3,923.61
	10/15/2008	-	-	98.84	-	-	4,022.53	3,923.69
	11/12/2008	-	-	98.52	-	-	4,022.53	3,924.01
	12/11/2008	-	-	98.48	-	-	4,022.53	3,924.05
	1/13/2009	-	-	98.86	-	-	4,022.53	3,923.67
	2/11/2009	-	-	98.52	-	-	4,022.53	3,924.01
	3/10/2009	-	-	98.29	-	-	4,022.53	3,924.24
	4/13/2009	-	-	98.44	-	-	4,022.53	3,924.09
	5/1/2009	-	-	98.27	-	-	4,022.53	3,924.26
	6/8/2009	-	-	98.25	-	-	4,022.53	3,924.28
	7/13/2009	-	-	98.28	-	-	4,022.53	3,924.25
	8/10/2009	-	-	98.27	-	-	4,022.53	3,924.26
	9/15/2009	-	-	98.04	-	-	4,022.53	3,924.49
	10/6/2009	-	-	94.93	-	-	4,022.53	3,927.60

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-12 cont.	11/9/2009	-	-	97.97	-	-	4,022.53	3,924.56
	12/23/2009	-	-	97.47	-	-	4,022.53	3,925.06
	1/20/2010	-	-	97.36	-	-	4,022.53	3,925.17
	2/9/2010	-	-	97.98	-	-	4,022.53	3,924.55
	3/9/2010	-	-	97.58	-	-	4,022.53	3,924.95
	4/12/2010	-	-	97.85	-	-	4,022.53	3,924.68
	5/24/2010	-	-	97.57	-	-	4,022.53	3,924.96
	6/14/2010	-	-	98.32	-	-	4,022.53	3,924.21
	7/20/2010	-	-	98.23	-	-	4,022.53	3,924.30
	8/11/2010	-	-	98.22	-	-	4,022.53	3,924.31
	9/21/2010	-	-	98.01	-	-	4,022.53	3,924.52
	10/20/2010	-	-	98.13	-	-	4,022.53	3,924.40
	11/8/2010	-	-	97.97	-	-	4,022.53	3,924.56
	12/7/2010	-	-	97.93	-	-	4,022.53	3,924.60
	1/18/2011	-	-	97.81	-	-	4,022.53	3,924.72
	2/8/2011	-	-	96.88	-	-	4,022.53	3,925.65
	3/8/2011	-	-	94.42	-	-	4,022.53	3,928.11
	4/13/2011	-	-	94.36	-	-	4,022.53	3,928.17
	5/23/2011	-	-	94.20	-	-	4,022.53	3,928.33
	6/28/2011	-	-	97.80	-	-	4,022.53	3,924.73
	7/19/2011	-	-	97.74	-	-	4,022.53	3,924.79
	8/31/2011	-	-	97.65	-	-	4,022.53	3,924.88
	9/27/2011	-	-	97.67	-	-	4,022.53	3,924.86
	10/24/2011	-	-	96.44	-	-	4,022.53	3,926.09
	11/29/2011	-	-	98.06	-	-	4,022.53	3,924.47
	12/23/2011	-	-	97.87	-	-	4,022.53	3,924.66
	1/31/2012	-	-	97.73	-	-	4,022.53	3,924.80
	2/29/2012	-	-	97.83	-	-	4,022.53	3,924.70
	3/27/2012	-	-	97.78	-	-	4,022.53	3,924.75
	4/18/2012	-	-	97.80	-	-	4,022.53	3,924.73
	5/21/2012	-	-	98.02	-	-	4,022.53	3,924.51
	7/17/2012	-	-	94.66	-	-	4,022.53	3,927.87
	8/21/2012	-	-	97.65	-	-	4,022.53	3,924.88
	9/17/2012	-	-	97.62	-	-	4,022.53	3,924.91
	12/13/2012	-	-	97.87	-	-	4,022.53	3,924.66
	1/9/2013	-	-	98.05	-	-	4,022.53	3,924.48
	2/6/2013	-	-	94.89	-	-	4,022.53	3,927.64
	3/6/2013	-	-	94.80	-	-	4,022.53	3,927.73
	5/1/2013	-	-	94.36	-	-	4,022.53	3,928.17
	6/5/2013	-	-	97.82	-	-	4,022.53	3,924.71
	7/3/2013	-	-	98.07	-	-	4,022.53	3,924.46
	7/30/2013	-	-	98.16	-	-	4,022.53	3,924.37
	8/15/2013	-	-	98.36	-	-	4,022.53	3,924.17
	10/2/2013	-	-	98.05	-	-	4,022.53	3,924.48
	12/23/2013	-	-	98.45	-	-	4,022.53	3,924.08
	1/9/2014	-	-	97.90	-	-	4,022.53	3,924.63
	2/12/2014	-	-	98.05	-	-	4,022.53	3,924.48
	3/19/2014	-	-	98.48	-	-	4,022.53	3,924.05
	4/3/2014	-	-	98.07	-	-	4,022.53	3,924.46
	5/7/2014	-	-	98.09	-	-	4,022.53	3,924.44
	6/5/2014	-	-	98.13	-	-	4,022.53	3,924.40
	7/1/2014	-	-	98.33	-	-	4,022.53	3,924.20
	7/22/2014	-	-	98.45	-	-	4,022.53	3,924.08
	8/5/2014	-	-	98.58	-	-	4,022.53	3,923.95
	9/4/2014	-	-	98.42	-	-	4,022.53	3,924.11
	10/2/2014	-	-	98.43	-	-	4,022.53	3,924.10
	11/6/2014	-	-	98.79	-	-	4,022.53	3,923.74
	12/4/2014	-	-	98.36	-	-	4,022.53	3,924.17
	4/21/2015	-	-	94.69	-	-	4,022.53	3,927.84
	5/15/2015	-	-	94.62	-	-	4,022.53	3,927.91
	6/11/2015	-	-	94.62	-	-	4,022.53	3,927.91
	8/24/2015	-	-	95.00	-	-	4,022.53	3,927.53
	11/23/2015	-	-	94.87	-	-	4,022.53	3,927.66
	1/20/2016	-	-	94.79	-	-	4,022.53	3,927.74
	2/16/2016	-	-	94.80	-	-	4,022.53	3,927.73
	3/15/2016	-	-	94.74	-	-	4,022.53	3,927.79
	4/20/2016	-	-	94.79	-	-	4,022.53	3,927.74
	5/17/2016	-	-	95.25	-	-	4,022.53	3,927.28
	8/16/2016	-	-	94.90	-	-	4,022.53	3,927.63
	9/20/2016	-	-	94.89	-	-	4,022.53	3,927.64
	10/18/2016	-	-	94.74	-	-	4,022.53	3,927.79
	12/20/2016	-	-	95.00	-	-	4,022.53	3,927.53
	8/3/2017	120	-	94.72	-	-	4,022.53	3,927.81
	8/16/2018	-	-	94.57	-	-	4,022.53	3,927.96
MW-13	12/13/2001	-	-	103.76	-	-	4,031.96	3,928.20
	3/22/2002	-	-	107.18	-	-	4,031.96	3,924.78
	9/16/2002	-	-	107.58	-	-	4,031.96	3,924.38
	9/20/2002	-	-	107.48	-	-	4,031.96	3,924.48
	4/5/2004	-	-	108.04	-	-	4,031.96	3,923.92
	5/17/2004	-	-	108.06	-	-	4,031.96	3,923.90
	5/24/2004	-	-	107.97	-	-	4,031.96	3,923.99

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-13 cont.	6/1/2004	-	-	107.97	-	-	4,031.96	3,923.99
	6/7/2004	-	-	107.89	-	-	4,031.96	3,924.07
	6/15/2004	-	-	107.99	-	-	4,031.96	3,923.97
	6/21/2004	-	-	107.98	-	-	4,031.96	3,923.98
	6/28/2004	-	-	108.29	-	-	4,031.96	3,923.67
	7/6/2004	-	-	108.12	-	-	4,031.96	3,923.84
	7/12/2004	-	-	108.22	-	-	4,031.96	3,923.74
	7/19/2004	-	-	108.16	-	-	4,031.96	3,923.80
	7/26/2004	-	-	108.34	-	-	4,031.96	3,923.62
	8/2/2004	-	-	108.17	-	-	4,031.96	3,923.79
	8/10/2004	-	-	108.29	-	-	4,031.96	3,923.67
	8/16/2004	-	-	108.27	-	-	4,031.96	3,923.69
	8/23/2004	-	-	108.01	-	-	4,031.96	3,923.95
	8/30/2004	-	-	108.24	-	-	4,031.96	3,923.72
	9/8/2004	-	-	108.31	-	-	4,031.96	3,923.65
	10/8/2004	-	-	108.23	-	-	4,031.96	3,923.73
	12/30/2004	-	-	108.12	-	-	4,031.96	3,923.84
	1/17/2005	-	-	108.49	-	-	4,031.96	3,923.47
	2/9/2005	-	-	108.38	-	-	4,031.96	3,923.58
	3/9/2005	-	-	108.44	-	-	4,031.96	3,923.52
	4/5/2005	-	-	108.04	-	-	4,031.96	3,923.92
	5/10/2005	-	-	108.09	-	-	4,031.96	3,923.87
	6/8/2005	-	-	108.18	-	-	4,031.96	3,923.78
	7/5/2005	-	-	108.47	-	-	4,031.96	3,923.49
	8/8/2005	-	-	108.37	-	-	4,031.96	3,923.59
	9/14/2005	-	-	108.28	-	-	4,031.96	3,923.68
	10/12/2005	-	-	108.42	-	-	4,031.96	3,923.54
	11/9/2005	-	-	108.51	-	-	4,031.96	3,923.45
	12/14/2005	-	-	108.31	-	-	4,031.96	3,923.65
	1/12/2006	-	-	108.16	-	-	4,031.96	3,923.80
	2/2/2006	-	-	108.17	-	-	4,031.96	3,923.79
	3/7/2006	-	-	108.33	-	-	4,031.96	3,923.63
	4/5/2006	-	-	108.22	-	-	4,031.96	3,923.74
	5/8/2006	-	-	108.18	-	-	4,031.96	3,923.78
	6/5/2006	-	-	108.30	-	-	4,031.96	3,923.66
	7/11/2006	-	-	108.34	-	-	4,031.96	3,923.62
	8/16/2006	-	-	108.43	-	-	4,031.96	3,923.53
	9/7/2006	-	-	108.32	-	-	4,031.96	3,923.64
	10/11/2006	-	-	108.31	-	-	4,031.96	3,923.65
	11/8/2006	-	-	108.18	-	-	4,031.96	3,923.78
	12/4/2006	-	-	108.79	-	-	4,031.96	3,923.17
	1/4/2007	-	-	108.11	-	-	4,031.96	3,923.85
	2/27/2007	-	-	108.16	-	-	4,031.96	3,923.80
	3/20/2007	-	-	108.37	-	-	4,031.96	3,923.59
	4/17/2007	-	-	108.13	-	-	4,031.96	3,923.83
	5/7/2007	-	-	108.37	-	-	4,031.96	3,923.59
	6/27/2007	-	-	108.23	-	-	4,031.96	3,923.73
	7/19/2007	-	-	108.13	-	-	4,031.96	3,923.83
	8/21/2007	-	-	108.10	-	-	4,031.96	3,923.86
	9/17/2007	-	-	108.08	-	-	4,031.96	3,923.88
	10/16/2007	-	-	108.03	-	-	4,031.96	3,923.93
	11/20/2007	-	-	108.11	-	-	4,031.96	3,923.85
	12/21/2007	-	-	107.92	-	-	4,031.96	3,924.04
	1/22/2008	-	-	108.42	-	-	4,031.96	3,923.54
	2/27/2008	-	-	108.40	-	-	4,031.96	3,923.56
	3/25/2008	-	-	108.22	-	-	4,031.96	3,923.74
	4/29/2008	-	-	108.22	-	-	4,031.96	3,923.74
	5/5/2008	-	-	108.22	-	-	4,031.96	3,923.74
	6/10/2008	-	-	108.23	-	-	4,031.96	3,923.73
	7/15/2008	-	-	108.23	-	-	4,031.96	3,923.73
	8/19/2008	-	-	108.24	-	-	4,031.96	3,923.72
	9/16/2008	-	-	108.52	-	-	4,031.96	3,923.44
	10/15/2008	-	-	108.44	-	-	4,031.96	3,923.52
	11/12/2008	-	-	108.15	-	-	4,031.96	3,923.81
	12/11/2008	-	-	108.34	-	-	4,031.96	3,923.62
	1/13/2009	-	-	108.55	-	-	4,031.96	3,923.41
	2/11/2009	-	-	108.27	-	-	4,031.96	3,923.69
	3/10/2009	-	-	108.05	-	-	4,031.96	3,923.91
	4/13/2009	-	-	108.20	-	-	4,031.96	3,923.76
	5/1/2009	-	-	108.02	-	-	4,031.96	3,923.94
	6/8/2009	-	-	107.90	-	-	4,031.96	3,924.06
	7/13/2009	-	-	107.97	-	-	4,031.96	3,923.99
	8/10/2009	-	-	107.98	-	-	4,031.96	3,923.98
	9/15/2009	-	-	107.83	-	-	4,031.96	3,924.13
	10/6/2009	-	-	107.73	-	-	4,031.96	3,924.23
	11/9/2009	-	-	107.95	-	-	4,031.96	3,924.01
	12/23/2009	-	-	107.45	-	-	4,031.96	3,924.51
	1/20/2010	-	-	107.40	-	-	4,031.96	3,924.56
	2/9/2010	-	-	108.03	-	-	4,031.96	3,923.93
	3/9/2010	-	-	107.65	-	-	4,031.96	3,924.31
	4/12/2010	-	-	107.94	-	-	4,031.96	3,924.02
	5/24/2010	-	-	107.76	-	-	4,031.96	3,924.20

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-13 cont.	6/14/2010	-	-	107.90	-	-	4,031.96	3,924.06
	7/20/2010	-	-	107.98	-	-	4,031.96	3,923.98
	8/11/2010	-	-	108.00	-	-	4,031.96	3,923.96
	9/21/2010	-	-	107.90	-	-	4,031.96	3,924.06
	10/20/2010	-	-	108.08	-	-	4,031.96	3,923.88
	11/8/2010	-	-	107.93	-	-	4,031.96	3,924.03
	12/7/2010	-	-	107.99	-	-	4,031.96	3,923.97
	1/18/2011	-	-	108.03	-	-	4,031.96	3,923.93
	2/8/2011	-	-	108.77	-	-	4,031.96	3,923.19
	3/8/2011	-	-	107.82	-	-	4,031.96	3,924.14
	4/13/2011	-	-	108.03	-	-	4,031.96	3,923.93
	5/23/2011	-	-	108.01	-	-	4,031.96	3,923.95
	6/28/2011	-	-	108.28	-	-	4,031.96	3,923.68
	7/19/2011	-	-	108.19	-	-	4,031.96	3,923.77
	8/31/2011	-	-	108.05	-	-	4,031.96	3,923.91
	9/27/2011	-	-	108.09	-	-	4,031.96	3,923.87
	10/24/2011	-	-	108.19	-	-	4,031.96	3,923.77
	11/29/2011	-	-	108.31	-	-	4,031.96	3,923.65
	12/23/2011	-	-	108.13	-	-	4,031.96	3,923.83
	1/31/2012	-	-	108.14	-	-	4,031.96	3,923.82
	2/29/2012	-	-	108.06	-	-	4,031.96	3,923.90
	3/27/2012	-	-	108.05	-	-	4,031.96	3,923.91
	4/18/2012	-	-	108.12	-	-	4,031.96	3,923.84
	5/21/2012	-	-	108.36	-	-	4,031.96	3,923.60
	7/17/2012	-	-	108.18	-	-	4,031.96	3,923.78
	8/21/2012	-	-	108.21	-	-	4,031.96	3,923.75
	9/17/2012	-	-	108.08	-	-	4,031.96	3,923.88
	12/13/2012	-	-	108.40	-	-	4,031.96	3,923.56
	1/9/2013	-	-	108.49	-	-	4,031.96	3,923.47
	2/6/2013	-	-	108.28	-	-	4,031.96	3,923.68
	3/6/2013	-	-	108.55	-	-	4,031.96	3,923.41
	6/5/2013	-	-	108.44	-	-	4,031.96	3,923.52
	7/3/2013	-	-	108.61	-	-	4,031.96	3,923.35
	7/30/2013	-	-	108.65	-	-	4,031.96	3,923.31
	8/15/2013	-	-	108.65	-	-	4,031.96	3,923.31
	10/2/2013	-	-	108.75	-	-	4,031.96	3,923.21
	12/23/2013	-	-	108.83	-	-	4,031.96	3,923.13
	1/9/2014	-	-	118.34	-	-	4,031.96	3,913.62
	2/12/2014	-	-	108.53	-	-	4,031.96	3,923.43
	3/19/2014	-	-	108.50	-	-	4,031.96	3,923.46
	4/3/2014	-	-	108.05	-	-	4,031.96	3,923.91
	5/7/2014	-	-	107.90	-	-	4,031.96	3,924.06
	6/5/2014	-	-	107.92	-	-	4,031.96	3,924.04
	7/1/2014	-	-	108.01	-	-	4,031.96	3,923.95
	7/22/2014	-	-	108.12	-	-	4,031.96	3,923.84
	8/5/2014	-	-	108.06	-	-	4,031.96	3,923.90
	9/4/2014	-	-	107.93	-	-	4,031.96	3,924.03
	10/2/2014	-	-	107.93	-	-	4,031.96	3,924.03
	11/6/2014	-	-	108.31	-	-	4,031.96	3,923.65
	12/4/2014	-	-	107.93	-	-	4,031.96	3,924.03
	8/24/2015	-	-	108.50	-	-	4,031.96	3,923.46
	1/20/2016	-	-	108.60	-	-	4,031.96	3,923.36
	2/16/2016	-	-	108.65	-	-	4,031.96	3,923.31
	3/15/2016	-	-	108.65	-	-	4,031.96	3,923.31
	4/20/2016	-	-	108.74	-	-	4,031.96	3,923.22
	5/17/2016	-	-	108.92	-	-	4,031.96	3,923.04
	8/16/2016	-	-	108.92	-	-	4,031.96	3,923.04
	9/20/2016	-	-	108.86	-	-	4,031.96	3,923.10
	10/18/2016	-	-	108.74	-	-	4,031.96	3,923.22
	12/20/2016	-	-	109.02	-	-	4,031.96	3,922.94
	8/3/2017	127	-	108.80	-	-	4,031.96	3,923.16
	8/16/2018	-	-	108.40	-	-	4,031.96	3,923.56
MW-14	12/13/2001	-	-	74.67	-	-	4,006.98	3,932.31
	3/22/2002	-	-	74.67	-	-	4,006.98	3,932.31
	9/16/2002	-	-	74.56	-	-	4,006.98	3,932.42
	9/20/2002	-	-	74.40	-	-	4,006.98	3,932.58
	4/5/2004	-	-	75.20	-	-	4,006.98	3,931.78
	5/17/2004	-	-	75.25	-	-	4,006.98	3,931.73
	5/24/2004	-	-	75.17	-	-	4,006.98	3,931.81
	6/1/2004	-	-	75.18	-	-	4,006.98	3,931.80
	6/7/2004	-	-	75.12	-	-	4,006.98	3,931.86
	6/15/2004	-	-	75.23	-	-	4,006.98	3,931.75
	6/21/2004	-	-	75.24	-	-	4,006.98	3,931.74
	6/28/2004	-	-	75.55	-	-	4,006.98	3,931.43
	7/6/2004	-	-	75.37	-	-	4,006.98	3,931.61
	7/12/2004	-	-	75.49	-	-	4,006.98	3,931.49
	7/19/2004	-	-	75.43	-	-	4,006.98	3,931.55
	7/26/2004	-	-	75.64	-	-	4,006.98	3,931.34
	8/2/2004	-	-	75.49	-	-	4,006.98	3,931.49
	8/10/2004	-	-	75.62	-	-	4,006.98	3,931.36
	8/16/2004	-	-	75.59	-	-	4,006.98	3,931.39

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-14 cont.	8/23/2004	-	-	75.32	-	-	4,006.98	3,931.66
	8/30/2004	-	-	75.57	-	-	4,006.98	3,931.41
	9/8/2004	-	-	75.65	-	-	4,006.98	3,931.33
	10/8/2004	-	-	75.61	-	-	4,006.98	3,931.37
	12/30/2004	-	-	75.45	-	-	4,006.98	3,931.53
	1/17/2005	-	-	75.74	-	-	4,006.98	3,931.24
	2/9/2005	-	-	75.46	-	-	4,006.98	3,931.52
	3/9/2005	-	-	75.37	-	-	4,006.98	3,931.61
	4/5/2005	-	-	74.84	-	-	4,006.98	3,932.14
	5/10/2005	-	-	74.72	-	-	4,006.98	3,932.26
	6/8/2005	-	-	74.71	-	-	4,006.98	3,932.27
	7/5/2005	-	-	74.93	-	-	4,006.98	3,932.05
	8/8/2005	-	-	74.78	-	-	4,006.98	3,932.20
	9/14/2005	-	-	74.62	-	-	4,006.98	3,932.36
	10/12/2005	-	-	74.69	-	-	4,006.98	3,932.29
	11/9/2005	-	-	74.69	-	-	4,006.98	3,932.29
	12/14/2005	-	-	74.29	-	-	4,006.98	3,932.69
	1/12/2006	-	-	74.01	-	-	4,006.98	3,932.97
	2/2/2006	-	-	73.91	-	-	4,006.98	3,933.07
	3/7/2006	-	-	73.97	-	-	4,006.98	3,933.01
	4/5/2006	-	-	73.80	-	-	4,006.98	3,933.18
	5/8/2006	-	-	73.69	-	-	4,006.98	3,933.29
	6/5/2006	-	-	73.78	-	-	4,006.98	3,933.20
	7/11/2006	-	-	73.83	-	-	4,006.98	3,933.15
	8/16/2006	-	-	73.94	-	-	4,006.98	3,933.04
	9/7/2006	-	-	72.93	-	-	4,006.98	3,934.05
	10/11/2006	-	-	73.95	-	-	4,006.98	3,933.03
	11/8/2006	-	-	73.88	-	-	4,006.98	3,933.10
	12/4/2006	-	-	74.53	-	-	4,006.98	3,932.45
	1/4/2007	-	-	73.79	-	-	4,006.98	3,933.19
	2/27/2007	-	-	73.73	-	-	4,006.98	3,933.25
	3/20/2007	-	-	73.90	-	-	4,006.98	3,933.08
	4/17/2007	-	-	73.68	-	-	4,006.98	3,933.30
	5/7/2007	-	-	73.88	-	-	4,006.98	3,933.10
	6/27/2007	-	-	73.80	-	-	4,006.98	3,933.18
	7/19/2007	-	-	73.69	-	-	4,006.98	3,933.29
	8/21/2007	-	-	73.61	-	-	4,006.98	3,933.37
	9/17/2007	-	-	73.54	-	-	4,006.98	3,933.44
	10/16/2007	-	-	73.39	-	-	4,006.98	3,933.59
	11/20/2007	-	-	73.34	-	-	4,006.98	3,933.64
	12/21/2007	-	-	73.05	-	-	4,006.98	3,933.93
	1/22/2008	-	-	73.44	-	-	4,006.98	3,933.54
	2/27/2008	-	-	73.37	-	-	4,006.98	3,933.61
	3/25/2008	-	-	73.17	-	-	4,006.98	3,933.81
	4/29/2008	-	-	73.16	-	-	4,006.98	3,933.82
	5/5/2008	-	-	73.14	-	-	4,006.98	3,933.84
	6/10/2008	-	-	73.16	-	-	4,006.98	3,933.82
	7/15/2008	-	-	73.25	-	-	4,006.98	3,933.73
	8/19/2008	-	-	73.32	-	-	4,006.98	3,933.66
	9/16/2008	-	-	73.68	-	-	4,006.98	3,933.30
	10/15/2008	-	-	73.67	-	-	4,006.98	3,933.31
	11/12/2008	-	-	73.44	-	-	4,006.98	3,933.54
	12/11/2008	-	-	73.69	-	-	4,006.98	3,933.29
	1/13/2009	-	-	73.89	-	-	4,006.98	3,933.09
	2/11/2009	-	-	73.57	-	-	4,006.98	3,933.41
	3/10/2009	-	-	73.34	-	-	4,006.98	3,933.64
	4/13/2009	-	-	73.43	-	-	4,006.98	3,933.55
	5/1/2009	-	-	73.30	-	-	4,006.98	3,933.68
	6/8/2009	-	-	73.15	-	-	4,006.98	3,933.83
	7/13/2009	-	-	73.29	-	-	4,006.98	3,933.69
	8/10/2009	-	-	73.32	-	-	4,006.98	3,933.66
	9/15/2009	-	-	73.22	-	-	4,006.98	3,933.76
	10/6/2009	-	-	73.15	-	-	4,006.98	3,933.83
	11/9/2009	-	-	73.43	-	-	4,006.98	3,933.55
	12/23/2009	-	-	72.93	-	-	4,006.98	3,934.05
	1/20/2010	-	-	72.88	-	-	4,006.98	3,934.10
	2/9/2010	-	-	73.48	-	-	4,006.98	3,933.50
	3/9/2010	-	-	73.09	-	-	4,006.98	3,933.89
	4/12/2010	-	-	73.40	-	-	4,006.98	3,933.58
	5/24/2010	-	-	73.24	-	-	4,006.98	3,933.74
	6/14/2010	-	-	73.40	-	-	4,006.98	3,933.58
	7/20/2010	-	-	73.53	-	-	4,006.98	3,933.45
	8/11/2010	-	-	73.59	-	-	4,006.98	3,933.39
	9/21/2010	-	-	73.55	-	-	4,006.98	3,933.43
	10/20/2010	-	-	73.74	-	-	4,006.98	3,933.24
	11/8/2010	-	-	73.62	-	-	4,006.98	3,933.36
	12/7/2010	-	-	73.73	-	-	4,006.98	3,933.25
	1/18/2011	-	-	73.73	-	-	4,006.98	3,933.25
	2/8/2011	-	-	73.53	-	-	4,006.98	3,933.45
	3/8/2011	-	-	73.54	-	-	4,006.98	3,933.44
	4/13/2011	-	-	73.78	-	-	4,006.98	3,933.20
	5/23/2011	-	-	73.75	-	-	4,006.98	3,933.23

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-14 cont.	6/28/2011	-	-	74.04	-	-	4,006.98	3,932.94
	7/19/2011	-	-	73.93	-	-	4,006.98	3,933.05
	8/31/2011	-	-	73.82	-	-	4,006.98	3,933.16
	9/27/2011	-	-	73.92	-	-	4,006.98	3,933.06
	10/24/2011	-	-	74.05	-	-	4,006.98	3,932.93
	11/29/2011	-	-	74.22	-	-	4,006.98	3,932.76
	12/23/2011	-	-	74.09	-	-	4,006.98	3,932.89
	1/31/2012	-	-	74.05	-	-	4,006.98	3,932.93
	2/29/2012	-	-	74.12	-	-	4,006.98	3,932.86
	3/27/2012	-	-	74.05	-	-	4,006.98	3,932.93
	4/18/2012	-	-	74.23	-	-	4,006.98	3,932.75
	5/21/2012	-	-	74.49	-	-	4,006.98	3,932.49
	7/17/2012	-	-	74.41	-	-	4,006.98	3,932.57
	8/21/2012	-	-	74.46	-	-	4,006.98	3,932.52
	9/17/2012	-	-	74.36	-	-	4,006.98	3,932.62
	12/13/2012	-	-	74.26	-	-	4,006.98	3,932.72
	1/9/2013	-	-	74.85	-	-	4,006.98	3,932.13
	2/6/2013	-	-	74.66	-	-	4,006.98	3,932.32
	3/6/2013	-	-	74.97	-	-	4,006.98	3,932.01
	6/5/2013	-	-	74.93	-	-	4,006.98	3,932.05
	7/3/2013	-	-	75.15	-	-	4,006.98	3,931.83
	7/30/2013	-	-	75.14	-	-	4,006.98	3,931.84
	8/15/2013	-	-	75.21	-	-	4,006.98	3,931.77
	10/2/2013	-	-	75.15	-	-	4,006.98	3,931.83
	12/23/2013	-	-	75.59	-	-	4,006.98	3,931.39
	1/9/2014	-	-	75.23	-	-	4,006.98	3,931.75
	2/12/2014	-	-	75.50	-	-	4,006.98	3,931.48
	3/19/2014	-	-	75.63	-	-	4,006.98	3,931.35
	4/3/2014	-	-	75.24	-	-	4,006.98	3,931.74
	5/7/2014	-	-	75.26	-	-	4,006.98	3,931.72
	6/5/2014	-	-	75.37	-	-	4,006.98	3,931.61
	7/1/2014	-	-	75.60	-	-	4,006.98	3,931.38
	7/22/2014	-	-	75.77	-	-	4,006.98	3,931.21
	8/5/2014	-	-	75.77	-	-	4,006.98	3,931.21
	9/4/2014	-	-	75.67	-	-	4,006.98	3,931.31
	10/2/2014	-	-	75.70	-	-	4,006.98	3,931.28
	11/6/2014	-	-	76.15	-	-	4,006.98	3,930.83
	12/4/2014	-	-	75.78	-	-	4,006.98	3,931.20
	8/24/2015	-	-	75.10	-	-	4,006.98	3,931.88
	1/20/2016	-	-	74.31	-	-	4,006.98	3,932.67
	2/16/2016	-	-	74.22	-	-	4,006.98	3,932.76
	3/15/2016	-	-	74.06	-	-	4,006.98	3,932.92
	4/20/2016	-	-	74.02	-	-	4,006.98	3,932.96
	5/17/2016	-	-	74.09	-	-	4,006.98	3,932.89
	8/16/2016	-	-	73.91	-	-	4,006.98	3,933.07
	9/20/2016	-	-	73.87	-	-	4,006.98	3,933.11
	10/18/2016	-	-	73.70	-	-	4,006.98	3,933.28
	12/20/2016	-	-	73.72	-	-	4,006.98	3,933.26
	8/3/2017	120	-	78.35	-	-	4,006.98	3,928.63
	8/16/2018	-	-	73.30	-	-	4,006.98	3,933.68
MW-19	9/20/2002	-	-	117.23	-	-	4,037.34	3,920.11
	4/5/2004	-	-	116.67	-	-	4,037.34	3,920.67
	5/17/2004	-	-	116.62	-	-	4,037.34	3,920.72
	5/24/2004	-	-	116.59	-	-	4,037.34	3,920.75
	6/1/2004	-	-	116.57	-	-	4,037.34	3,920.77
	6/7/2004	-	-	116.59	-	-	4,037.34	3,920.75
	6/15/2004	-	-	116.53	-	-	4,037.34	3,920.81
	6/21/2004	-	-	116.63	-	-	4,037.34	3,920.71
	6/28/2004	-	-	116.68	-	-	4,037.34	3,920.66
	7/6/2004	-	-	116.65	-	-	4,037.34	3,920.69
	7/12/2004	-	-	116.66	-	-	4,037.34	3,920.68
	7/19/2004	-	-	116.68	-	-	4,037.34	3,920.66
	7/26/2004	-	-	116.73	-	-	4,037.34	3,920.61
	8/2/2004	-	-	116.71	-	-	4,037.34	3,920.63
	8/10/2004	-	-	116.71	-	-	4,037.34	3,920.63
	8/16/2004	-	-	116.74	-	-	4,037.34	3,920.60
	8/23/2004	-	-	116.69	-	-	4,037.34	3,920.65
	8/30/2004	-	-	116.69	-	-	4,037.34	3,920.65
	9/8/2004	-	-	116.73	-	-	4,037.34	3,920.61
	10/8/2004	-	-	116.78	-	-	4,037.34	3,920.56
	12/30/2004	-	-	116.76	-	-	4,037.34	3,920.58
	1/17/2005	-	-	116.78	-	-	4,037.34	3,920.56
	2/9/2005	-	-	116.76	-	-	4,037.34	3,920.58
	3/9/2005	-	-	116.70	-	-	4,037.34	3,920.64
	4/5/2005	-	-	116.64	-	-	4,037.34	3,920.70
	5/10/2005	-	-	116.63	-	-	4,037.34	3,920.71
	6/8/2005	-	-	116.57	-	-	4,037.34	3,920.77
	7/5/2005	-	-	116.64	-	-	4,037.34	3,920.70
	8/8/2005	-	-	116.77	-	-	4,037.34	3,920.57
	9/15/2005	-	-	116.71	-	-	4,037.34	3,920.63
	10/12/2005	-	-	116.70	-	-	4,037.34	3,920.64

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Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-19 cont.	11/9/2005	-	-	116.74	-	-	4,037.34	3,920.60
	12/14/2005	-	-	116.74	-	-	4,037.34	3,920.60
	1/12/2006	-	-	116.73	-	-	4,037.34	3,920.61
	2/2/2006	-	-	116.70	-	-	4,037.34	3,920.64
	3/7/2006	-	-	116.72	-	-	4,037.34	3,920.62
	4/5/2006	-	-	116.68	-	-	4,037.34	3,920.66
	5/8/2006	-	-	116.61	-	-	4,037.34	3,920.73
	6/5/2006	-	-	116.66	-	-	4,037.34	3,920.68
	7/11/2006	-	-	116.73	-	-	4,037.34	3,920.61
	8/16/2006	-	-	116.74	-	-	4,037.34	3,920.60
	9/7/2006	-	-	116.74	-	-	4,037.34	3,920.60
	10/11/2006	-	-	116.80	-	-	4,037.34	3,920.54
	11/8/2006	-	-	116.79	-	-	4,037.34	3,920.55
	12/4/2006	-	-	116.90	-	-	4,037.34	3,920.44
	1/4/2007	-	-	116.65	-	-	4,037.34	3,920.69
	2/27/2007	-	-	116.71	-	-	4,037.34	3,920.63
	3/20/2007	-	-	116.76	-	-	4,037.34	3,920.58
	4/17/2007	-	-	116.61	-	-	4,037.34	3,920.73
	5/7/2007	-	-	116.66	-	-	4,037.34	3,920.68
	6/27/2007	-	-	116.59	-	-	4,037.34	3,920.75
	7/19/2007	-	-	116.65	-	-	4,037.34	3,920.69
	8/21/2007	-	-	116.63	-	-	4,037.34	3,920.71
	9/17/2007	-	-	116.70	-	-	4,037.34	3,920.64
	10/16/2007	-	-	116.66	-	-	4,037.34	3,920.68
	11/20/2007	-	-	116.78	-	-	4,037.34	3,920.56
	12/21/2007	-	-	116.64	-	-	4,037.34	3,920.70
	1/22/2008	-	-	116.88	-	-	4,037.34	3,920.46
	2/27/2008	-	-	117.04	-	-	4,037.34	3,920.30
	3/25/2008	-	-	116.88	-	-	4,037.34	3,920.46
	4/29/2008	-	-	116.89	-	-	4,037.34	3,920.45
	5/5/2008	-	-	116.82	-	-	4,037.34	3,920.52
	6/10/2008	-	-	116.79	-	-	4,037.34	3,920.55
	7/15/2008	-	-	116.88	-	-	4,037.34	3,920.46
	8/19/2008	-	-	116.89	-	-	4,037.34	3,920.45
	9/16/2008	-	-	117.17	-	-	4,037.34	3,920.17
	10/15/2008	-	-	117.09	-	-	4,037.34	3,920.25
	11/12/2008	-	-	116.82	-	-	4,037.34	3,920.52
	12/11/2008	-	-	117.09	-	-	4,037.34	3,920.25
	1/13/2009	-	-	117.28	-	-	4,037.34	3,920.06
	2/11/2009	-	-	116.83	-	-	4,037.34	3,920.51
	3/10/2009	-	-	116.78	-	-	4,037.34	3,920.56
	4/13/2009	-	-	116.80	-	-	4,037.34	3,920.54
	5/1/2009	-	-	116.77	-	-	4,037.34	3,920.57
	6/8/2009	-	-	116.61	-	-	4,037.34	3,920.73
	7/13/2009	-	-	116.78	-	-	4,037.34	3,920.56
	8/10/2009	-	-	116.74	-	-	4,037.34	3,920.60
	9/15/2009	-	-	116.62	-	-	4,037.34	3,920.72
	10/6/2009	-	-	116.47	-	-	4,037.34	3,920.87
	11/9/2009	-	-	116.64	-	-	4,037.34	3,920.70
	12/23/2009	-	-	116.29	-	-	4,037.34	3,921.05
	1/20/2010	-	-	116.27	-	-	4,037.34	3,921.07
	2/9/2010	-	-	116.61	-	-	4,037.34	3,920.73
	3/9/2010	-	-	116.32	-	-	4,037.34	3,921.02
	4/12/2010	-	-	116.62	-	-	4,037.34	3,920.72
	5/24/2010	-	-	116.37	-	-	4,037.34	3,920.97
	6/14/2010	-	-	116.51	-	-	4,037.34	3,920.83
	7/20/2010	-	-	116.59	-	-	4,037.34	3,920.75
	8/11/2010	-	-	116.58	-	-	4,037.34	3,920.76
	9/21/2010	-	-	116.49	-	-	4,037.34	3,920.85
	10/20/2010	-	-	116.60	-	-	4,037.34	3,920.74
	11/8/2010	-	-	116.52	-	-	4,037.34	3,920.82
	12/7/2010	-	-	116.57	-	-	4,037.34	3,920.77
	1/18/2011	-	-	116.38	-	-	4,037.34	3,920.96
	2/8/2011	-	-	116.37	-	-	4,037.34	3,920.97
	3/8/2011	-	-	116.21	-	-	4,037.34	3,921.13
	4/13/2011	-	-	116.12	-	-	4,037.34	3,921.22
	5/23/2011	-	-	116.35	-	-	4,037.34	3,920.99
	6/28/2011	-	-	116.57	-	-	4,037.34	3,920.77
	7/19/2011	-	-	116.49	-	-	4,037.34	3,920.85
	8/31/2011	-	-	116.37	-	-	4,037.34	3,920.97
	9/27/2011	-	-	116.38	-	-	4,037.34	3,920.96
	10/24/2011	-	-	116.55	-	-	4,037.34	3,920.79
	11/29/2011	-	-	116.63	-	-	4,037.34	3,920.71
	12/23/2011	-	-	116.35	-	-	4,037.34	3,920.99
	1/31/2012	-	-	116.35	-	-	4,037.34	3,920.99
	2/29/2012	-	-	116.39	-	-	4,037.34	3,920.95
	3/27/2012	-	-	116.30	-	-	4,037.34	3,921.04
	4/18/2012	-	-	116.39	-	-	4,037.34	3,920.95
	5/21/2012	-	-	116.54	-	-	4,037.34	3,920.80
	7/17/2012	-	-	116.36	-	-	4,037.34	3,920.98
	8/21/2012	-	-	116.33	-	-	4,037.34	3,921.01
	9/17/2012	-	-	116.25	-	-	4,037.34	3,921.09

Table 1
Summary of Groundwater Elevations and PSH Thickness
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Well Borehole/ID	Date Measured	Well Total Depth (feet)	Product (feet below TOC)	Water level (feet below TOC)	PSH Thickness (feet)	Product Elevation (feet AMSL)	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet)
MW-19 cont.	12/13/2012	-	-	116.42	-	-	4,037.34	3,920.92
	1/9/2013	-	-	116.92	-	-	4,037.34	3,920.42
	2/6/2013	-	-	116.28	-	-	4,037.34	3,921.06
	3/6/2013	-	-	116.57	-	-	4,037.34	3,920.77
	5/1/2013	-	-	116.11	-	-	4,037.34	3,921.23
	6/5/2013	-	-	116.23	-	-	4,037.34	3,921.11
	7/3/2013	-	-	116.46	-	-	4,037.34	3,920.88
	7/30/2013	-	-	116.48	-	-	4,037.34	3,920.86
	8/15/2013	-	-	116.47	-	-	4,037.34	3,920.87
	10/2/2013	-	-	116.28	-	-	4,037.34	3,921.06
	12/23/2013	-	-	116.63	-	-	4,037.34	3,920.71
	1/9/2014	-	-	116.35	-	-	4,037.34	3,920.99
	2/12/2014	-	-	117.46	-	-	4,037.34	3,919.88
	3/19/2014	-	-	116.43	-	-	4,037.34	3,920.91
	4/3/2014	-	-	116.12	-	-	4,037.34	3,921.22
	5/7/2014	-	-	116.13	-	-	4,037.34	3,921.21
	6/5/2014	-	-	116.19	-	-	4,037.34	3,921.15
	7/1/2014	-	-	116.27	-	-	4,037.34	3,921.07
	7/22/2014	-	-	116.46	-	-	4,037.34	3,920.88
	8/5/2014	-	-	116.48	-	-	4,037.34	3,920.86
	9/4/2014	-	-	116.31	-	-	4,037.34	3,921.03
	10/2/2014	-	-	116.25	-	-	4,037.34	3,921.09
	11/6/2014	-	-	116.72	-	-	4,037.34	3,920.62
	12/4/2014	-	-	116.18	-	-	4,037.34	3,921.16
	8/24/2015	-	-	116.50	-	-	4,037.34	3,920.84
	1/20/2016	-	-	116.34	-	-	4,037.34	3,921.00
	2/16/2016	-	-	116.28	-	-	4,037.34	3,921.06
	3/15/2016	-	-	116.15	-	-	4,037.34	3,921.19
	4/20/2016	-	-	116.31	-	-	4,037.34	3,921.03
	5/17/2016	-	-	116.44	-	-	4,037.34	3,920.90
	8/16/2016	-	-	116.41	-	-	4,037.34	3,920.93
	9/20/2016	-	-	116.40	-	-	4,037.34	3,920.94
	10/18/2016	-	-	116.16	-	-	4,037.34	3,921.18
	12/20/2016	-	-	116.60	-	-	4,037.34	3,920.74
	8/3/2017	120	-	117.32	-	-	4,037.34	3,920.02
	8/16/2018	-	-	116.35	-	-	4,037.34	3,920.99

Notes:
ft feet
- No measurement
TOC Top of casing
AMSL Above mean sea level
NG Not gauged

Table 2
Summary of Groundwater Analytical Data
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Sample ID	Sample Date	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alklanity (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzen e (mg/L)	Xylenes (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
NMWQCC Groundwater Quality Standards (mg/L)		NE	NE	NE	NE	250	10	600	1,000	0.01	0.75	0.75	0.62	NE	NE	NE	NE
EW-1	7/19/2007	--	--	--	--	1,820	--	--	3,370	ND	ND	ND	ND	--	--	--	--
	5/6/2008	ND	105	105	ND	41,500	ND	1,150	77,200	ND	ND	ND	ND	3,340	1,040	74.1	19,000
	5/5/2009	ND	99	99	ND	30,000	ND	1,110	60,000	ND	ND	ND	ND	3,680	1,110	58	21,700
	5/25/2010	ND	113	113	ND	29,600	ND	852	40,200	ND	ND	ND	ND	2,830	1,050	74.7	16,300
	5/24/2011	<5	110	110	8.8	32,300	0.57	865	58,300	<0.002	<0.002	<0.002	<0.006	2,450	694	69.6	14,400
	10/25/2011	<20	116	116	25.6	35,000	3.9	923	66,300	<0.001	0.003	<0.001	<0.003	2,400	624	42.7	11,300
	7/18/2012	<20	108	108	38	26,500	6.1	746	59,600	<0.001	<0.001	<0.001	<0.003	2,450	748	67.6	13,000
	8/1/2013	<20	148	148	<50	26,100	4	691	61,000	--	--	--	--	2,480	740	68.9	13,900
	7/23/2014	--	--	--	25.3	28,900	--	803	52,300	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	8/26/2015	--	--	--	<5.0	24,200	--	711	65,000	--	--	--	--	--	--	--	--
DUP	8/10/2016	NS															
	8/3/2017	NS															
	8/16/2018	--	--	--	11.7	21,000	--	588	36,000	--	--	--	--	--	--	--	--
	8/16/2018	--	--	--	11.7	22,100	--	556	39,900	--	--	--	--	--	--	--	--
EW-2	10/4/2017	--	--	--	6.6	17,500	--	492	28,000	--	--	--	--	--	--	--	--
	8/16/2018	NS															
MW-11	5/8/2007	ND	197	197	4.6	3,570	ND	440	7,400	ND	ND	ND	ND	1,060	258	7.8	496
	5/6/2008	ND	168	168	8.18	1,560	ND	163	4,140	0.009	ND	ND	ND	615	166	8.62	204
	5/5/2009	ND	162	162	6.82	1,140	ND	149	3,430	0.02	ND	ND	ND	528	150	6	172
	5/25/2010	ND	139	139	ND	1,010	ND	142	3,630	0.039	ND	ND	ND	332	105	4.44	118
	5/24/2011	<5	149	149	2.6	811	3.6	99.9	2,510	0.0912	<0.002	<0.002	<0.006	298	83.7	6.61	103
	10/25/2011	<20	220	220	2.7	715	4.9	90.9	1,790	<0.001	<0.001	<0.001	<0.003	325	86	6	101
	10/25/2011	<5.0	208	208	2.5	659	6.1	84.6	1,910	<0.001	<0.001	<0.001	<0.003	352	93	6	108
	7/18/2012	<20	144	144	4.1	560	7.3	55.3	1,780	<0.001	<0.001	<0.001	<0.003	215	64.2	3.6	80.6
	8/2/2013	<20	198	198	4.4	801	4.7	98.1	2,640	0.0056	<0.001	<0.001	<0.003	325	97.5	8.37	93.2
	7/23/2014	--	--	--	2.3	532	--	50.4	1,760	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	8/26/2015	--	--	--	2.2	521	--	57.9	3,620	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	2.5	564	--	78.2	1,750	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	2.5	564	--	78	1,750	--	--	--	--	--	--	--	--
	8/3/2017	--	--	--	5.3	1,170	--	116	3,030	--	--	--	--	--	--	--	--
	8/16/2018	--	--	--	3.19	879	--	161	3,250	--	--	--	--	--	--	--	--

Table 2
Summary of Groundwater Analytical Data
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Sample ID	Sample Date	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alkalanity (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzen e (mg/L)	Xylenes (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
NMWQCC Groundwater Quality Standards (mg/L)		NE	NE	NE	NE	250	10	600	1,000	0.01	0.75	0.75	0.62	NE	NE	NE	NE
MW-12 DUP	5/8/2007	ND	79.8	79.8	19.2	61,700	ND	1,690	107,000	ND	ND	ND	ND	4,760	1,330	143	15,800
	5/8/2007	ND	79.9	79.9	19.2	50,200	ND	1,630	104,000	ND	ND	ND	ND	5,040	1,430	146	32,800
	5/6/2008	ND	97	97	ND	48,600	ND	1,600	88,500	ND	ND	ND	ND	3,880	1,030	84.3	24,000
	5/6/2008	ND	97	97	ND	45,100	ND	1,610	84,300	ND	ND	ND	ND	3,840	1,030	85.4	23,100
	5/5/2009	ND	101	101	ND	35,300	1.79	1,140	71,200	ND	ND	ND	ND	3,720	844	59.3	21,200
	5/5/2009	ND	116	116	ND	31,400	1.94	1,180	69,800	ND	ND	ND	ND	3,760	872	54.8	22,200
	5/25/2010	ND	106	106	ND	59,300	ND	1,210	72,000	ND	ND	ND	ND	2,490	700	42.4	14,300
	5/25/2010	ND	108	108	ND	47,700	ND	1,450	79,000	ND	ND	ND	ND	2,760	788	47.2	14,900
	5/24/2011	<20	114	114	9.7	45,500	2.2	1,170	66,400	<0.002	<0.002	<0.002	<0.006	3,260	794	79.1	15,100
	5/24/2011	<5	105	105	10.2	46,600	2	1,350	75,500	<0.002	<0.002	<0.002	<0.006	3,230	808	83.7	15,700
	10/25/2011	<20	138	138	<1	32,200	3	1,020	55,900	<0.001	<0.001	<0.001	<0.003	3,370	743	54	14,800
	7/18/2012	<20	122	122	32.6	25,000	3.3	716	57,200	<0.001	<0.001	<0.001	<0.003	3,420	812	56.5	11,400
	8/1/2013	<20	163	163	<50	21,400	3.6	731	47,000	<0.001	<0.001	<0.001	<0.003	2,580	613	60.6	12,100
	7/23/2014	--	--	--	<50	38,500	--	1,680	72,200	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	8/26/2015	--	--	--	<5.0	26,200	--	804	87,300	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	34.1	30,900	--	1,070	63,900	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	34.1J	30,900	--	1,070	63,900	--	--	--	--	--	--	--	--
	8/3/2017	--	--	--	44.9	37,900	--	1,480	69,600	--	--	--	--	--	--	--	--
	8/3/2017	--	--	--	45.3	43,000	--	1,510	73,600	--	--	--	--	--	--	--	--
	8/16/2018	--	--	--	11.1	37,300	--	1,430	60,300	--	--	--	--	--	--	--	--
MW-13	5/8/2007	ND	209	209	0.9	217	16	249	1,160	ND	ND	ND	ND	198	43.1	ND	72.4
	5/6/2008	ND	201	201	ND	192	11.9	234	1,270	ND	ND	ND	ND	193	43.9	3.09	66.8
	5/5/2009	ND	204	204	1.32	212	15.9	236	1,400	ND	ND	ND	ND	226	46.8	3.1	74.4
	5/25/2010	ND	196	196	1.42	214	17.8	276	1,500	ND	ND	ND	ND	203	42.4	2.81	71.9
	5/24/2011	<5	217	218	1.4	235	15	267	1,120	<0.002	<0.002	<0.002	<0.006	204	41.4	<5.0	73.5
	10/25/2011	<20	765	765	1.3	233	18	253	1,090	<0.001	<0.001	<0.001	<0.003	541	99.6	16.9	81.3
	7/18/2012	<20	340	340	2.4	230	15.2	239	1,240	<0.001	<0.001	<0.001	<0.003	252	53.4	6.24	71.5
	8/1/2013	<20	243	243	1.7	221	15.7	232	1,420	<0.001	<0.001	<0.001	<0.003	321	51	6.22	74.9
	7/23/2014	--	--	--	1.7	206	--	284	1,160	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	8/26/2015	--	--	--	1.2	201	--	278	1,850	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	7.4	206	--	310	1,220	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	7.4	206	--	310	1,220	--	--	--	--	--	--	--	--
	8/3/2017	--	--	--	2.0	192	--	267	972	--	--	--	--	--	--	--	--
	8/16/2018	--	--	--	1.42	200	--	248	1,180	--	--	--	--	--	--	--	--

Table 2
Summary of Groundwater Analytical Data
ConocoPhillips - Maljamar E&P
Lea County, New Mexico

Sample ID	Sample Date	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alkalanity (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzen e (mg/L)	Xylenes (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)
NMWQCC Groundwater Quality Standards (mg/L)		NE	NE	NE	NE	250	10	600	1,000	0.01	0.75	0.75	0.62	NE	NE	NE	NE
MW-14	5/8/2007	ND	203	203	7.1	1,000	10.7	1,010	4,990	ND	ND	ND	ND	656	197	5.7	65.3
	5/6/2008	ND	208	208	8.04	658	10.1	904	3,760	ND	ND	ND	ND	613	165	6.09	57.1
	5/5/2009	ND	230	230	6.05	576	11.8	774	3,740	ND	ND	ND	ND	648	176	5.74	51.3
	5/25/2010	ND	263	263	4.96	566	13.7	1,030	2,430	ND	ND	ND	ND	544	150	6	79.3
	5/24/2011	<5	276	276	4.2	527	16	1,110	2,980	<0.002	<0.002	<0.002	<0.006	525	133	<5.0	57.7
	10/25/2011	<20	390	390	3.4	408	20	848	2,350	<0.001	<0.001	<0.001	<0.003	532	159	14.4	58.1
	7/18/2012	<20	314	314	1.1	382	16	812	2,430	<0.001	<0.001	<0.001	<0.003	455	137	9	49.8
	8/1/2013	<20	293	293	3	333	19.6	863	2,150	<0.001	<0.001	<0.001	<0.003	454	130	5	60.2
	8/1/2013	<20	289	289	3	359	20.8	946	2,170	<0.001	<0.001	<0.001	<0.003	452	132	6	62.2
	7/23/2014	--	--	--	3.2	393	--	847	2,430	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	7/23/2014	--	--	--	3.2	362	--	784	2,280	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	8/26/2015	--	--	--	1.4	160	--	930	3,130	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	1.7	190	--	1,010	2,180	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	1.7	190	--	1,010	2,180	--	--	--	--	--	--	--	--
	8/3/2017	--	--	--	2.4	215	--	953	2,220	--	--	--	--	--	--	--	--
	8/16/2018	--	--	--	<1.00	222	--	923	2,100	--	--	--	--	--	--	--	--
MW-19	5/8/2007	ND	272	272	1.1	101	0.75	20.8	837	ND	ND	ND	ND	1,690	571	24.7	983
	5/6/2008	ND	229	229	ND	114	1.06	29.3	1,190	ND	ND	ND	ND	3,220	617	27.8	1,260
	5/5/2009	ND	241	241	0.836	105	0.944	26.7	597	ND	ND	ND	ND	1,850	664	21.5	1,020
	5/25/2010	ND	245	245	0.97	108	0.867	33.2	1,080	ND	ND	ND	ND	2,050	632	53.8	1,000
	5/24/2011	<5	255	256	1.1	140	1.4	27.4	589	<0.002	<0.002	<0.002	<0.006	3,080	640	41.9	1,050
	10/25/2011	<20	436	436	<1	122	2.2	32.9	523	<0.001	<0.001	<0.001	<0.003	2,240	654	39.6	1,070
	7/18/2012	<20	635	635	1.4	113	2.6	27.8	585	<0.001	<0.001	<0.001	<0.003	203	37	4.2	53
	8/1/2013	<20	289	289	1.3	112	3.1	27.8	583	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	7/23/2014	--	--	--	1.4	113	--	31.3	557	<0.001	<0.001	<0.001	<0.003	--	--	--	--
	8/26/2015	--	--	--	<1.0	111	--	32.2	696	--	--	--	--	--	--	--	--
	8/26/2015	--	--	--	1.2	112	--	32.1	602	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	1.2	123	--	29.3	590	--	--	--	--	--	--	--	--
	8/10/2016	--	--	--	1.2	123	--	29.3	590	--	--	--	--	--	--	--	--
	8/3/2017	--	--	--	1.5	114	--	29.0	540	--	--	--	--	--	--	--	--
	8/16/2018	--	--	--	0.996 J	117	--	32.5	587	--	--	--	--	--	--	--	--

Notes:

NMWQCC

New Mexico Water Quality Control Commission

mg/L

Milligrams per liter

NS

Not sampled

bold

Exceeds NMWQCC groundwater quality standards

J

The identification of the analyte is acceptable; the reported value is an estimate

--

Not analyzed

DUP

Duplicate sample

NE

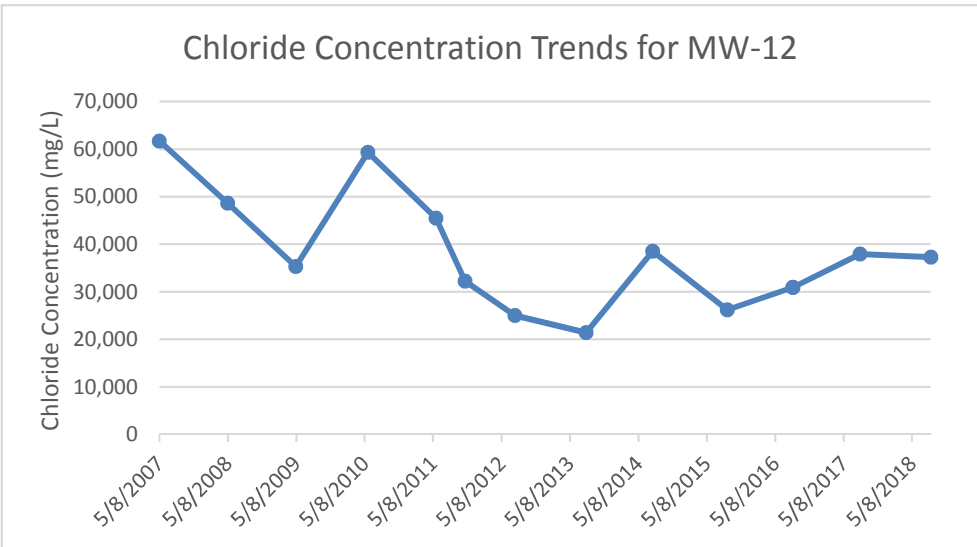
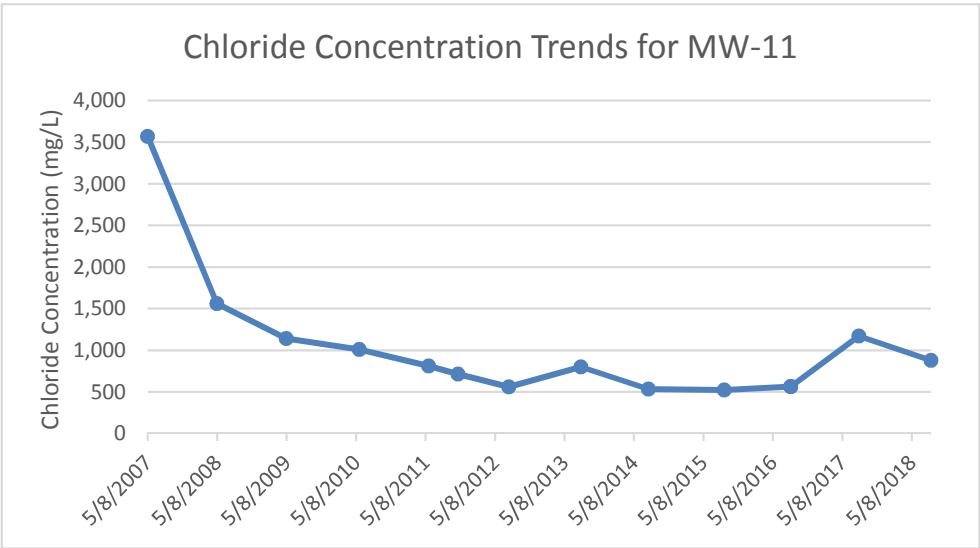
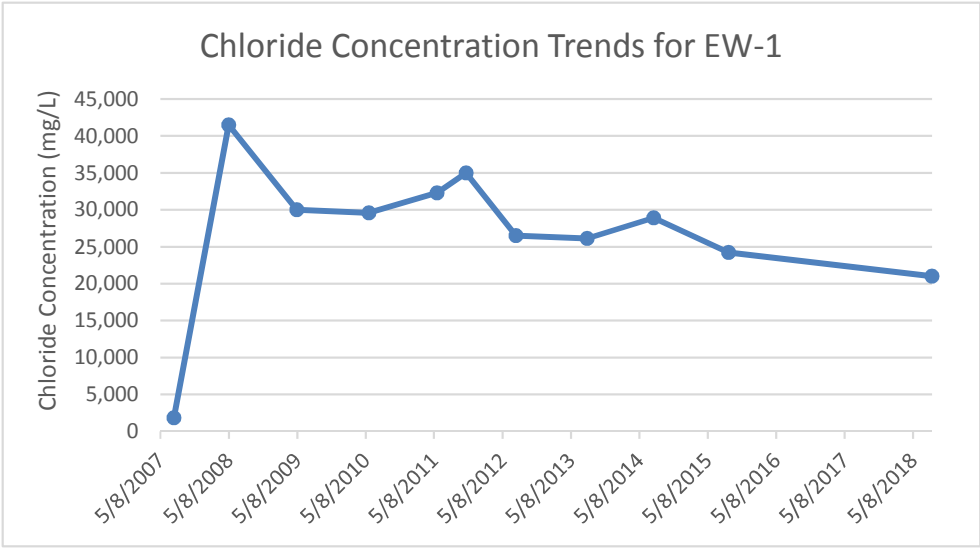
Not established

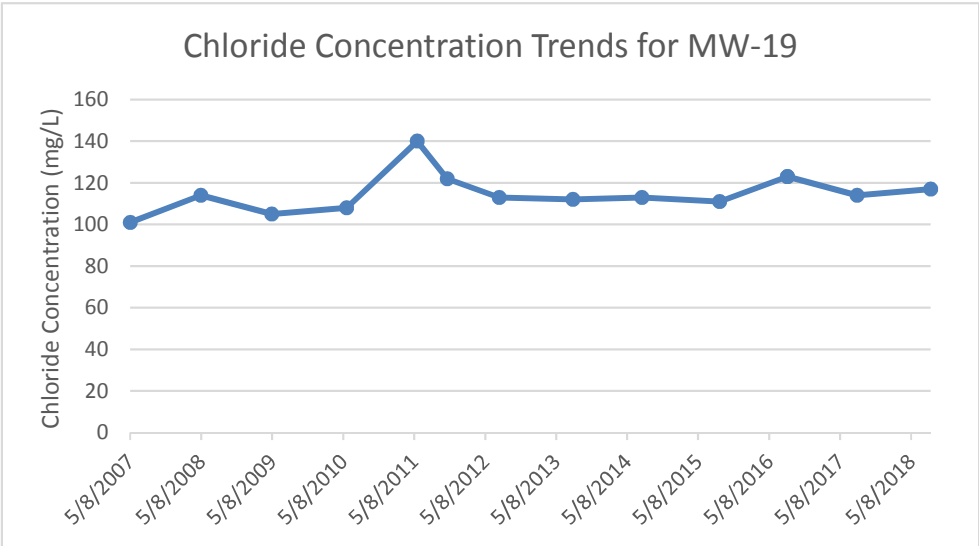
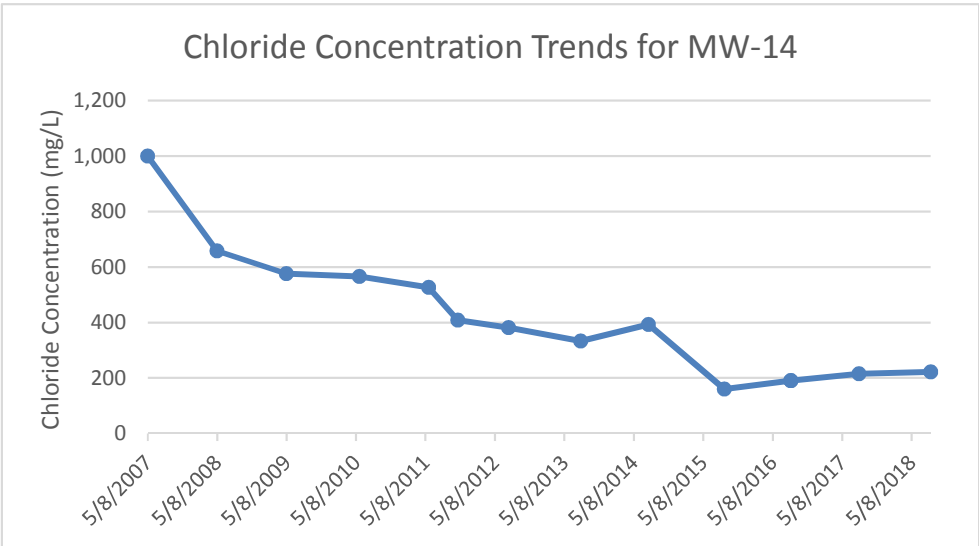
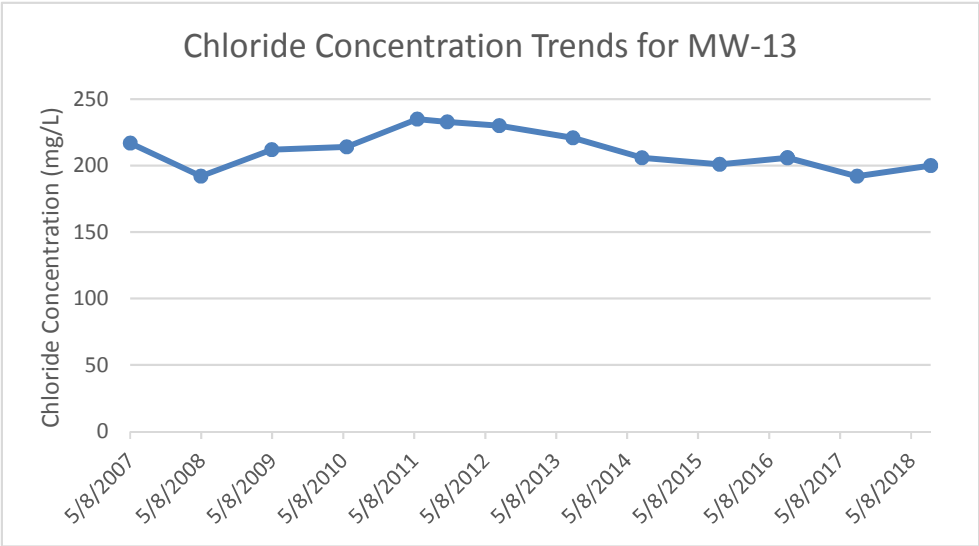
ND

Not detected above laboratory detection limit



APPENDIX A







APPENDIX B



ANALYTICAL REPORT

September 06, 2018

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1020204
Samples Received: 08/23/2018
Project Number: 212C-MD-01369
Description: Maljamar E&P Groundwater

Report To: Todd Wells
4001 N. Big Spring St., Ste. 401
Midland, TX 79705

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-19 L1020204-01 GW

Collected by Joe Tyler Collected date/time 08/16/18 11:45 Received date/time 08/23/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG
Wet Chemistry by Method 9056A	WG1156941	1	08/24/18 23:57	08/24/18 23:57	NJM
Wet Chemistry by Method 9056A	WG1156941	5	08/25/18 00:11	08/25/18 00:11	NJM

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-12 L1020204-02 GW

Collected by Joe Tyler Collected date/time 08/16/18 13:10 Received date/time 08/23/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG
Wet Chemistry by Method 9056A	WG1156941	100	08/25/18 00:39	08/25/18 00:39	MCG
Wet Chemistry by Method 9056A	WG1157346	10	08/25/18 17:12	08/25/18 17:12	NJM
Wet Chemistry by Method 9056A	WG1157346	1000	08/25/18 17:53	08/25/18 17:53	NJM

EW-1 L1020204-03 GW

Collected by Joe Tyler Collected date/time 08/16/18 14:10 Received date/time 08/23/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG
Wet Chemistry by Method 9056A	WG1156995	500	08/25/18 00:31	08/25/18 00:31	NJM
Wet Chemistry by Method 9056A	WG1160142	20	08/31/18 19:54	08/31/18 19:54	MCG
Wet Chemistry by Method 9056A	WG1161351	10	09/04/18 23:50	09/04/18 23:50	ELN

MW-14 L1020204-04 GW

Collected by Joe Tyler Collected date/time 08/16/18 15:30 Received date/time 08/23/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG
Wet Chemistry by Method 9056A	WG1156995	1	08/25/18 00:45	08/25/18 00:45	NJM
Wet Chemistry by Method 9056A	WG1156995	5	08/25/18 01:26	08/25/18 01:26	NJM
Wet Chemistry by Method 9056A	WG1158085	20	08/28/18 16:52	08/28/18 16:52	NJM

MW-11 L1020204-05 GW

Collected by Joe Tyler Collected date/time 08/16/18 16:50 Received date/time 08/23/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG
Wet Chemistry by Method 9056A	WG1156995	20	08/25/18 01:54	08/25/18 01:54	NJM
Wet Chemistry by Method 9056A	WG1160142	1	08/31/18 20:37	08/31/18 20:37	MCG
Wet Chemistry by Method 9056A	WG1160142	5	08/31/18 20:51	08/31/18 20:51	MCG

MW-13 L1020204-06 GW

Collected by Joe Tyler Collected date/time 08/16/18 17:50 Received date/time 08/23/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG
Wet Chemistry by Method 9056A	WG1156995	5	08/25/18 02:22	08/25/18 02:22	NJM
Wet Chemistry by Method 9056A	WG1160142	1	08/31/18 21:06	08/31/18 21:06	MCG
Wet Chemistry by Method 9056A	WG1160142	5	08/31/18 21:20	08/31/18 21:20	MCG

ACCOUNT:

ConocoPhillips - Tetra Tech

PROJECT:

212C-MD-01369

SDG:

L1020204

DATE/TIME:

09/06/18 10:47

PAGE:

3 of 24

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



DUP-1 L1020204-07 GW				Collected by Joe Tyler	Collected date/time 08/16/18 00:00	Received date/time 08/23/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Gravimetric Analysis by Method 2540 C-2011	WG1156597	1	08/24/18 18:52	08/24/18 19:34	MCG	
Wet Chemistry by Method 9056A	WG1156995	500	08/25/18 02:50	08/25/18 02:50	NJM	
Wet Chemistry by Method 9056A	WG1158085	10	08/28/18 17:06	08/28/18 17:06	NJM	
Wet Chemistry by Method 9056A	WG1160142	10	08/31/18 21:49	08/31/18 21:49	MCG	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

CASE NARRATIVE



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

Chris McCord
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-19

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.



Collected date/time: 08/16/18 11:45

L1020204

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	587	<u>T8</u>	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Bromide	0.996	<u>J</u>	0.0790	1.00	1.00	1	08/24/2018 23:57	WG1156941
Chloride	117		0.260	1.00	5.00	5	08/25/2018 00:11	WG1156941
Sulfate	32.5		0.0774	5.00	5.00	1	08/24/2018 23:57	WG1156941

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	60300	T8	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Bromide	11.1		0.790	1.00	10.0	10	08/25/2018 17:12	WG1157346
Chloride	37300		51.9	1.00	1000	1000	08/25/2018 17:53	WG1157346
Sulfate	1430		7.74	5.00	500	100	08/25/2018 00:39	WG1156941

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	36000	T8	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Bromide	11.7		0.790	1.00	10.0	10	09/04/2018 23:50	WG1161351
Chloride	21000		26.0	1.00	500	500	08/25/2018 00:31	WG1156995
Sulfate	588		1.55	5.00	100	20	08/31/2018 19:54	WG1160142

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	2100	T8	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Bromide	U		0.0790	1.00	1.00	1	08/25/2018 00:45	WG1156995
Chloride	222		0.260	1.00	5.00	5	08/25/2018 01:26	WG1156995
Sulfate	923		1.55	5.00	100	20	08/28/2018 16:52	WG1158085

MW-11

SAMPLE RESULTS - 05

ONE LAB. NATIONWIDE.



Collected date/time: 08/16/18 16:50

L1020204

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3250	<u>T8</u>	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Bromide	3.19		0.0790	1.00	1.00	1	08/31/2018 20:37	WG1160142
Chloride	879		1.04	1.00	20.0	20	08/25/2018 01:54	WG1156995
Sulfate	161		0.387	5.00	25.0	5	08/31/2018 20:51	WG1160142

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	1180	T8	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Bromide	1.42		0.0790	1.00	1.00	1	08/31/2018 21:06	WG1160142
Chloride	200		0.260	1.00	5.00	5	08/25/2018 02:22	WG1156995
Sulfate	248		0.387	5.00	25.0	5	08/31/2018 21:20	WG1160142

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	39900	T8	2.82	10.0	10.0	1	08/24/2018 19:34	WG1156597

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Bromide	11.7		0.790	1.00	10.0	10	08/31/2018 21:49	WG1160142
Chloride	22100		26.0	1.00	500	500	08/25/2018 02:50	WG1156995
Sulfate	556		0.774	5.00	50.0	10	08/28/2018 17:06	WG1158085

WG1156597

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Gravimetric Analysis by Method 2540 C-2011

[L1020204-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R3336674-1 08/24/18 19:34

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1020204-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1020204-01 08/24/18 19:34 • (DUP) R3336674-4 08/24/18 19:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	587	602	1	2.52		5

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

(LCS) R3336674-2 08/24/18 19:34 • (LCSD) R3336674-3 08/24/18 19:34

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	7840	8530	89.1	96.9	85.0-115			8.43	10

7 Gl

8 Al

9 Sc

WG1156941

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 9056A

[L1020204-01.02](#)

Method Blank (MB)

(MB) R3336636-1 08/24/18 13:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Bromide	U		0.0790	1.00
Chloride	U		0.0519	1.00
Sulfate	U		0.0774	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1019998-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1019998-01 08/24/18 19:46 • (DUP) R3336636-4 08/24/18 20:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	0.000	1	0.000		15
Chloride	12.2	12.2	1	0.0851		15
Sulfate	21.1	21.0	1	0.481		15

L1020037-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1020037-01 08/24/18 22:19 • (DUP) R3336636-8 08/24/18 22:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	0.000	1	0.000		15
Chloride	4.30	4.22	1	1.87		15
Sulfate	17.4	17.2	1	0.968		15

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

(LCS) R3336636-2 08/24/18 14:07 • (LCSD) R3336636-3 08/24/18 14:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromide	40.0	38.7	38.8	96.7	97.0	80.0-120			0.385	15
Chloride	40.0	38.9	38.9	97.1	97.2	80.0-120			0.0450	15
Sulfate	40.0	38.8	39.0	97.0	97.4	80.0-120			0.435	15

WG1156941

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



L1020204-01.02

L1019998-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1019998-01 08/24/18 19:46 • (MS) R3336636-5 08/24/18 20:42 • (MSD) R3336636-6 08/24/18 20:56												
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Bromide	50.0	ND	46.0	45.9	91.9	91.8	1	80.0-120			0.174	15
Chloride	50.0	12.2	62.8	63.0	101	102	1	80.0-120			0.274	15
Sulfate	50.0	21.1	70.1	70.2	98.0	98.3	1	80.0-120			0.177	15

L1020037-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1020037-01 08/24/18 22:19 • (MS) R3336636-9 08/24/18 22:47							
Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	
Bromide	50.0	ND	48.6	97.2	1	80.0-120	
Chloride	50.0	4.30	54.3	100	1	80.0-120	
Sulfate	50.0	17.4	67.2	99.5	1	80.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG1156995

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 9056A

[L1020204-03,04,05,06,07](#)

Method Blank (MB)

(MB) R3337026-1 08/24/18 22:23				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1020347-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1020347-01 08/24/18 23:21 • (DUP) R3337026-4 08/24/18 23:35						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	8.32	8.22	1	1.22		15

L1020350-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1020350-01 08/25/18 07:14 • (DUP) R3337026-7 08/25/18 07:28						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	8.43	8.78	1	4.02		15

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

(LCS) R3337026-2 08/24/18 22:40 • (LCSD) R3337026-3 08/24/18 22:53										
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Chloride	40.0	39.0	38.8	97.6	96.9	80.0-120			0.705	15

L1020347-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1020347-01 08/24/18 23:21 • (MS) R3337026-5 08/24/18 23:49 • (MSD) R3337026-6 08/25/18 00:03												
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	50.0	8.32	56.3	56.6	96.0	96.6	1	80.0-120			0.594	15

L1020350-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1020350-01 08/25/18 07:14 • (MS) R3337026-8 08/25/18 07:42							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	8.43	59.0	101	1	80.0-120	

WG1157346

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 9056A

[L1020204-02](#)

Method Blank (MB)

(MB) R3337004-1 08/25/18 11:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Bromide	U		0.0790	1.00
Chloride	U		0.0519	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1020757-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1020757-12 08/25/18 13:57 • (DUP) R3337004-4 08/25/18 14:11

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	0.000	1	0.000		15
Chloride	53.1	51.1	1	3.96		15

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

(LCS) R3337004-2 08/25/18 12:09 • (LCSD) R3337004-3 08/25/18 12:23

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromide	40.0	38.4	38.7	96.1	96.7	80.0-120			0.595	15
Chloride	40.0	39.1	39.0	97.8	97.6	80.0-120			0.206	15

L1020760-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1020760-04 08/25/18 15:06 • (MS) R3337004-5 08/25/18 15:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Bromide	50.0	5.76	26.0	40.4	1	80.0-120	<u>J6</u>

WG1158085

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 9056A

[L1020204-04,07](#)

Method Blank (MB)

(MB) R3337710-1 08/28/18 23:41

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Sulfate	U		0.0774	5.00

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1020212-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1020212-06 08/29/18 01:36 • (DUP) R3337710-6 08/29/18 01:50

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	170	169	5	0.499		15

7 Gl

8 Al

9 Sc

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

(LCS) R3337710-2 08/28/18 23:55 • (LCSD) R3337710-3 08/29/18 00:09

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Sulfate	40.0	36.2	36.5	90.5	91.1	80.0-120			0.650	15

WG1160142

QUALITY CONTROL SUMMARY

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Wet Chemistry by Method 9056A

[L1020204-03,05,06,07](#)

Method Blank (MB)

(MB) R3338543-1 08/31/18 10:44

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Bromide	U		0.0790	1.00
Sulfate	U		0.0774	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1022171-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1022171-20 08/31/18 14:58 • (DUP) R3338543-4 08/31/18 15:12

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Bromide	U	0.000	1	0.000		15
Sulfate	0.0896	0.107	1	17.7	J P1	15

L1022247-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1022247-04 08/31/18 17:44 • (DUP) R3338543-7 08/31/18 17:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Bromide	ND	0.000	1	0.000		15
Sulfate	ND	2.33	1	0.000		15

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

(LCS) R3338543-2 08/31/18 10:59 • (LCSD) R3338543-3 08/31/18 11:13

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Bromide	40.0	39.3	39.4	98.3	98.5	80.0-120			0.151	15
Sulfate	40.0	39.2	39.3	98.1	98.2	80.0-120			0.148	15

L1022171-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1022171-20 08/31/18 14:58 • (MS) R3338543-5 08/31/18 15:26 • (MSD) R3338543-6 08/31/18 15:41

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Bromide	50.0	U	50.7	50.4	101	101	1	80.0-120			0.730	15
Sulfate	50.0	0.0896	51.0	50.7	102	101	1	80.0-120			0.659	15

WG1160142

QUALITY CONTROL SUMMARY

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Wet Chemistry by Method 9056A

[L1020204-03,05,06,07](#)

L1022247-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1022247-04 08/31/18 17:44 • (MS) R3338543-8 08/31/18 18:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Bromide	50.0	ND	48.8	97.5	1	80.0-120	
Sulfate	50.0	ND	51.8	98.9	1	80.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

WG1161351

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 9056A

L1020204-03

Method Blank (MB)

(MB) R3339105-1 09/04/18 18:43				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Bromide	U		0.0790	1.00

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1022500-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1022500-17 09/05/18 02:43 • (DUP) R3339105-4 09/05/18 03:17						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Bromide	0.489	0.499	1	2.07	J	15

L1022844-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1022844-01 09/05/18 05:26 • (DUP) R3339105-7 09/05/18 05:40						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Bromide	ND	0.000	1	0.000		15

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

(LCS) R3339105-2 09/04/18 18:57 • (LCSD) R3339105-3 09/04/18 19:12										
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Bromide	40.0	40.6	40.6	102	101	80.0-120			0.0517	15

L1022500-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1022500-17 09/05/18 02:43 • (MS) R3339105-5 09/05/18 03:30 • (MSD) R3339105-6 09/05/18 03:45												
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Bromide	50.0	0.489	48.5	49.3	96.1	97.6	1	80.0-120			1.47	15

L1022844-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1022844-01 09/05/18 05:26 • (MS) R3339105-8 09/05/18 05:55							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Bromide	50.0	ND	49.2	98.4	1	80.0-120	

GLOSSARY OF TERMS



Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

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

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



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

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

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

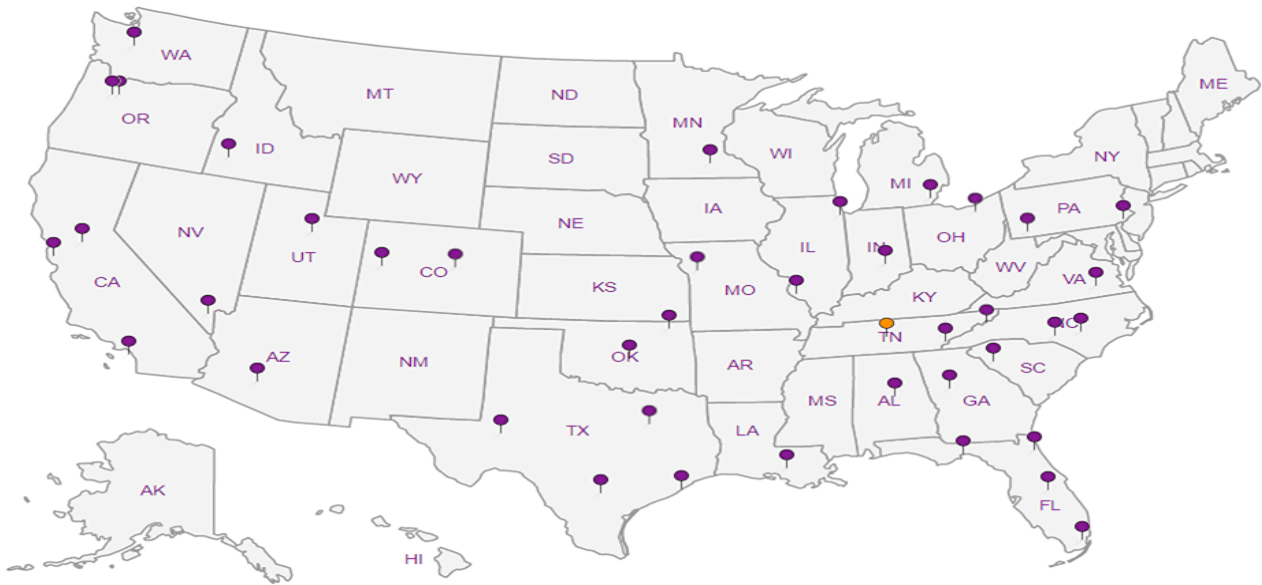
Third Party Federal Accreditations

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

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

Our Locations

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



ConocoPhillips - Tetra Tech 4001 N. Big Spring St., Ste. 401 Midland, TX 79705		Billing Information:		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page ____ of ____				
		Accounts Payable 4001 N. Big Spring St., Ste. 401 Midland, TX 79705														 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859				
Report to: Todd Wells		Email To: todd.wells@tetrattech.com																		
Project Description: Maljamar E&P Groundwater		City/State Collected: <i>Maljamar, New Mexico</i>																		
Phone: 432-687-8137 Fax:		Client Project # <i>213C-MD-01369</i>		Lab Project # COPTETRA-MALJAMAR												L# <i>1020204</i> B243				
Collected by (print): <i>Joe Tyler</i>		Site/Facility ID #		P.O. #												Acctnum: COPTETRA Template: T139384 Prelogin: P666791 TSR: 526 - Chris McCord PB:				
Collected by (signature): <i>[Signature]</i>		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #												Shipped Via:				
Immediately Packed on Ice: N ☐ Y ☒		Date Results Needed		No. of Cntrs																
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time															
MW-19	Grab	GW	—	8-16-18	1145	2	X	X												-01
MW-12	Grab	GW	—	8-16-18	1310	2	X	X												-02
EW-1	Grab	GW	—	8-16-18	1410	2	X	X												-03
MW-14	Grab	GW	—	8-16-18	1530	2	X	X												-04
MW-11	Grab	GW	—	8-16-18	1650	2	X	X												-05
MW-13	Grab	GW	—	8-16-18	1750	2	X	X												-06
Dup-1	Grab	GW	—	8-16-18	1415	2	X	X												-07
		GW				2	X	X												
		GW				2	X	X												
* Matrix:		Remarks:		pH _____ Temp _____												Sample Receipt Checklist COC Seal Present/Intact: ☒ Y ☐ N COC Signed/Accurate: ☒ Y ☐ N Bottles arrive intact: ☒ Y ☐ N Correct bottles used: ☒ Y ☐ N Sufficient volume sent: ☒ Y ☐ N If Applicable VOA Zero Headspace: ☐ Y ☐ N Preservation Correct/Checked: ☐ Y ☐ N				
SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Samples returned via: ☐ UPS ☒ FedEx ☐ Courier		Tracking # <i>4430 3429 2693</i>												Trip Blank Received: Yes/No HCL/MeOH TBR				
Relinquished by: (Signature) <i>[Signature]</i>		Date: <i>8-20-18</i>		Time: <i>0800</i>		Received by: (Signature) <i>[Signature]</i>		Temp: <i>4.9°C</i>		Bottles Received: <i>19</i>		If preservation required by Login: Date/Time								
Relinquished by: (Signature) <i>[Signature]</i>		Date: <i>8-22-18</i>		Time: <i>1635</i>		Received by: (Signature) <i>[Signature]</i>		Date: <i>8/23/18</i>		Time: <i>0845</i>		Hold: Condition: <i>NCF / OK</i>								