

**1R – 279**

**2013 AGWMR**

**FEB 2014**



## **2013 ANNUAL GROUNDWATER MONITORING REPORT**

**BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1--TOWNSHIP 18 SOUTH--RANGE 34 EAST  
LEA COUNTY, NEW MEXICO**

~~Abatement Plan AP-104~~

**1R - 279**

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**FEBRUARY 2014  
REF. NO. 073015 (4)**



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SECTION 1--TOWNSHIP 18 SOUTH--RANGE 34 EAST  
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Abatement Plan AP-104

Prepared For:  
Chevron Environmental Management Company

SUBMITTED BY:

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## Section 1.0 Introduction

Conestoga-Rovers & Associates, Inc. (CRA) has prepared this report, on behalf of Chevron Environmental Management Company (CEMC), summarizing semi-annual groundwater monitoring conducted in 2013 at the Buckeye Vacuum Field Unit Site (Site). Data presented in this report were gathered during two semi-annual groundwater monitoring events conducted on May 15, 2013 and October 24, 2013.

The Site is located in Section 1, Township 18 South, Range 34 East in Lea County, New Mexico. Latitude and longitude coordinates for the Site are 32°46'57.05"N and 103°30'26.67"W, respectively. A map showing the general location of the Site is in Figure 1.

## Section 2.0 Background

Twenty-three monitor wells were installed in 1989 to assess elevated chloride impacts in groundwater from a leak in the casing of production well VG SAU #58 in the Buckeye Vacuum Field Unit. The production well was plugged and abandoned in 2000. Its former location is a few feet south of RW-3 on the site plan. Two recovery wells, RW-1 and RW-2 were also installed in 1989 and pumped continuously to remediate the chloride plume. Water produced from these recovery wells was used in the waterflood operation in the Buckeye Unit. Groundwater extraction from RW-1 and RW 2 ceased in 2001. Thirteen of the monitor wells were plugged in 1999. Ten monitor wells, TW-9 through TW-11, TW-13 through TW-15, TW-17, TW-19, TW-20 and TW-23 presently exist on the Site. A third extraction well, RW-3, was installed in 2001. Groundwater was extracted intermittently from RW-3 for use by the Chevron Vacuum Field Management Team (FMT) in its waterflood operation during 2011, 2012 and 2013. Currently, RW-3 is not being used as the FMT evaluates conditions at the tank battery where water recovered from RW-3 would be sent.

Groundwater monitoring has been conducted at this Site since 1990. The New Mexico Oil Conservation Division (NMOCD) declined a request to close the Site in 2003 and directed that monitoring activities should continue. The NMOCD agreed to reduce the number of wells being monitored and to reduce monitoring frequency in 2004. Further reductions were agreed to verbally by the NMOCD in 2009. Groundwater monitoring continued in 2010. CRA was chosen to continue this project in November 2010. TW-10 and RW-3 continued to exhibit elevated chloride concentrations above the New Mexico Water Quality Control Commission (NMWQCC) remediation standard during 2011, 2012, and 2013. Wells TW-9, TW-20 and RW-2 were added to the monitoring program in 2013 to verify that the contaminant plume is defined according to NMWQCC standards.

## Section 3.0 Regulatory Framework

The NMOCD of the New Mexico Energy, Minerals, and Natural Resources Department has regulatory jurisdiction over corrective actions conducted at the Site. Corrective actions follow guidance given by the NMOCD in *Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993)*. These guidelines require remediation of groundwater to the human health standards of the New Mexico

Water Quality Control Commission set forth in New Mexico Administrative Code 20.6.2.3103B as follows:

<i>Analyte</i>	<i>NMWQCC Standard for Groundwater (mg/L)</i>
Chloride	250
Total Dissolved Solids (TDS)	1000

## Section 4.0 Groundwater Monitoring

The Site includes 10 active monitor wells and three extraction wells as shown on Figure 2. Groundwater at the Site was monitored during two semi-annual events in 2013. The first groundwater monitoring event occurred on May 15, 2013. The second event was conducted on October 24, 2013. Eight monitor wells TW-9, TW-10, TW-13, TW-14, TW-20, TW-23, RW-2, and RW-3 were gauged and sampled during both events in 2013. Additional wells are shown on Figure 2 that were not sampled during 2013; however, these wells had previously demonstrated stable or declining contaminant levels below the NMWQCC standards for chloride and TDS.

### 4.1 Field Methodology

Excluding RW-3, the fluid level in each well was measured before purging and sampling. The recovery wells can be sampled only while they are pumping. There is no access to gauge or sample inside the casings. Fluid levels were measured to the nearest hundredth of a foot with an electronic water level meter. The fluid levels were measured from the permanent reference point on the top of the casing in each well or from the north side of the top of the casing where no permanent reference point had been marked.

The conductivity profile of each well was determined by recording measurements of conductivity of the water column at intervals of two to five feet from the top of the water column to the total depth of each well. Each monitor well was purged and sampled from the depth of the highest measured conductivity using a low-flow pump. Temperature, conductivity, and pH were monitored with a YSI 556 MP meter during purging, which continued until all parameters were within specified limits. Temperature, conductivity and pH readings were also obtained of purge water from RW-3. Groundwater samples from RW-3 were collected at the sample port on the wellhead while the well was pumping. All samples were labeled, recorded on a chain-of-custody form and placed on ice in a cooler to maintain a temperature of 40°F (4°C) or lower. Field equipment was decontaminated with an Alconox™ wash and distilled water rinse before beginning field activities and between wells.

The groundwater samples collected during 2013 were sent to Xenco Laboratories in Odessa, Texas for analysis of dissolved chloride according to method EPA300.0 and for TDS by method SM2540C. Analyses were completed within required holding times.

## 4.2 Potentiometric Surface and Gradient

Fluid level measurements collected during 2013 are summarized in Table 1. A cumulative summary of fluid level measurements at the Site is presented in Appendix A. Top of casing elevations were recorded in feet above mean sea level (famsl). Elevations used in generating the potentiometric surface maps were calculated in famsl. Groundwater elevations ranged from 3861.69 famsl (TW-17) to 3858.06 famsl (TW-20) during the first semi-annual monitoring event on May 15, 2013. The potentiometric surface map for the May 2013 event is shown in Figure 3. The groundwater flow direction is to the northeast with a calculated gradient of 0.0053 feet/feet (ft/ft).

Groundwater elevations ranged from 3859.03 famsl (TW-23) to 3851.86 famsl (TW-9) during the second monitoring event on October 24, 2013. The potentiometric surface map for the October 2013 event is shown in Figure 4. Due to pumping at RW-3, the potentiometric surface shows groundwater flows radially toward RW-3. No gradient was calculated for the October 2013 monitoring event.

The groundwater flow direction and calculated gradient during 2013 is consistent with historical data dating back to 2009. Comparison of gauging data from the two monitoring events in October 2012 and October 2013 indicates groundwater elevations increased in TW-11 and TW-17 but decreased in the remaining wells TW-9, TW-10, TW-13 through TW-15, TW-19, TW-20, TW-23, and RW-2. The increase ranged from 0.36 (TW-17) to 2.98 (TW-11) while the decrease in the remaining wells ranged from 1.64 ft to 6.10 ft. The average decrease in elevation among those wells was 2.8 ft.

## 4.3 Groundwater Results

Groundwater samples were collected from wells TW-9, TW-10, TW-13, TW-14, TW-20, TW-23, RW-2, and RW-3 during semi-annual monitoring events conducted on May 16, 2013 and October 25, 2013. The analytical results for groundwater samples collected during the 2013 monitoring events are summarized in Table 2. A cumulative table of historical groundwater analytical results for the Site is provided in Appendix B. Analytical results for the May and October 2013 monitoring events are shown on Figure 5 and 6, respectively.

Dissolved chloride and TDS were present at concentrations above the NMWQCC standards in samples collected from wells TW-10 and RW-3 during both 2013 monitoring events. The dissolved chloride concentration in TW-10 decreased from 379 mg/L to 261 mg/L during 2013. TDS in TW-10 decreased from 1340 mg/L to 1100 mg/L. Dissolved chloride concentrations decreased from 1240 mg/L to 285 mg/L; and TDS concentrations decreased from 2,840 mg/L to 801 mg/L in RW-3 during 2013. The long-term trend shows dissolved chloride and TDS concentrations in TW-10 and RW-3 continued to decrease in 2013. Dissolved chloride and TDS concentrations in TW-9, TW-13, TW-14, TW-20, TW-23 and RW-2 were below the NMWQCC standards in 2013. These wells are considered to be downgradient of the chloride and TDS plumes where concentrations exceed the NMWQCC groundwater standards.

Graphs showing the trend of COC concentrations versus time are presented in Appendix C. The analytical laboratory reports and associated chain-of-custodies are presented in Appendix D.



## Section 5.0 Groundwater Remediation and Performance

Dissolved chloride and TDS concentrations in RW-3 decreased in 2013 but remained above the NMWQCC standards with intermittent pumping of water from RW-3 for use in the waterflood operation in the Buckeye Vacuum Field Production Unit. The duration and frequency of pumping from RW-3, while effectively removing dissolved chloride and TDS from the contaminant plume, may be insufficient to reduce concentrations below NMWQCC standards in a timely manner. Increasing the volume of groundwater recovered from RW-3 may be necessary to achieve those goals and is currently under consideration.

## Section 6.0 Summary of Findings

Based on activities conducted at the Site in 2013, CRA presents the following summary of findings:

- Groundwater monitoring was conducted by CRA on a semi-annual basis in 2013. The monitoring events occurred in May and October 2013. The groundwater flow direction across the Site was generally to the east during the May 2013 monitoring event. The calculated gradient was 0.0053 ft/ft. Groundwater flow was radial toward RW-3 due to pumping; thus, no gradient was calculated during the October 2013 event.
- Groundwater elevations decreased in nine of the eleven monitoring wells gauged in October 2012 and October 2013. The elevation of the potentiometric surface in those wells decreased by an average of 2.8 ft during that period.
- Dissolved chloride and TDS were present at concentrations above NMWQCC standards in the samples collected from wells TW-10 and RW-3 during the 2013 monitoring events. The long-term trend shows dissolved chloride and TDS concentrations in TW-10 and RW-3 continued to decrease in 2013. Dissolved chloride and TDS concentrations in TW-9, TW-13, TW-14, TW-20, TW-23 and RW-2 were below the NMWQCC standards during 2013. These wells are considered to be downgradient of the chloride and TDS plumes where concentrations exceed NMWQCC groundwater standards.
- Dissolved chloride and TDS concentrations in groundwater have been reduced by the pumping from RW-3, since it began in 2001. However, residual COC concentrations remain impacted above the groundwater standards and the plume for each COC has expanded slightly to include TW-10 during 2011, 2012 and 2013.

## Section 7.0 Planned Activities

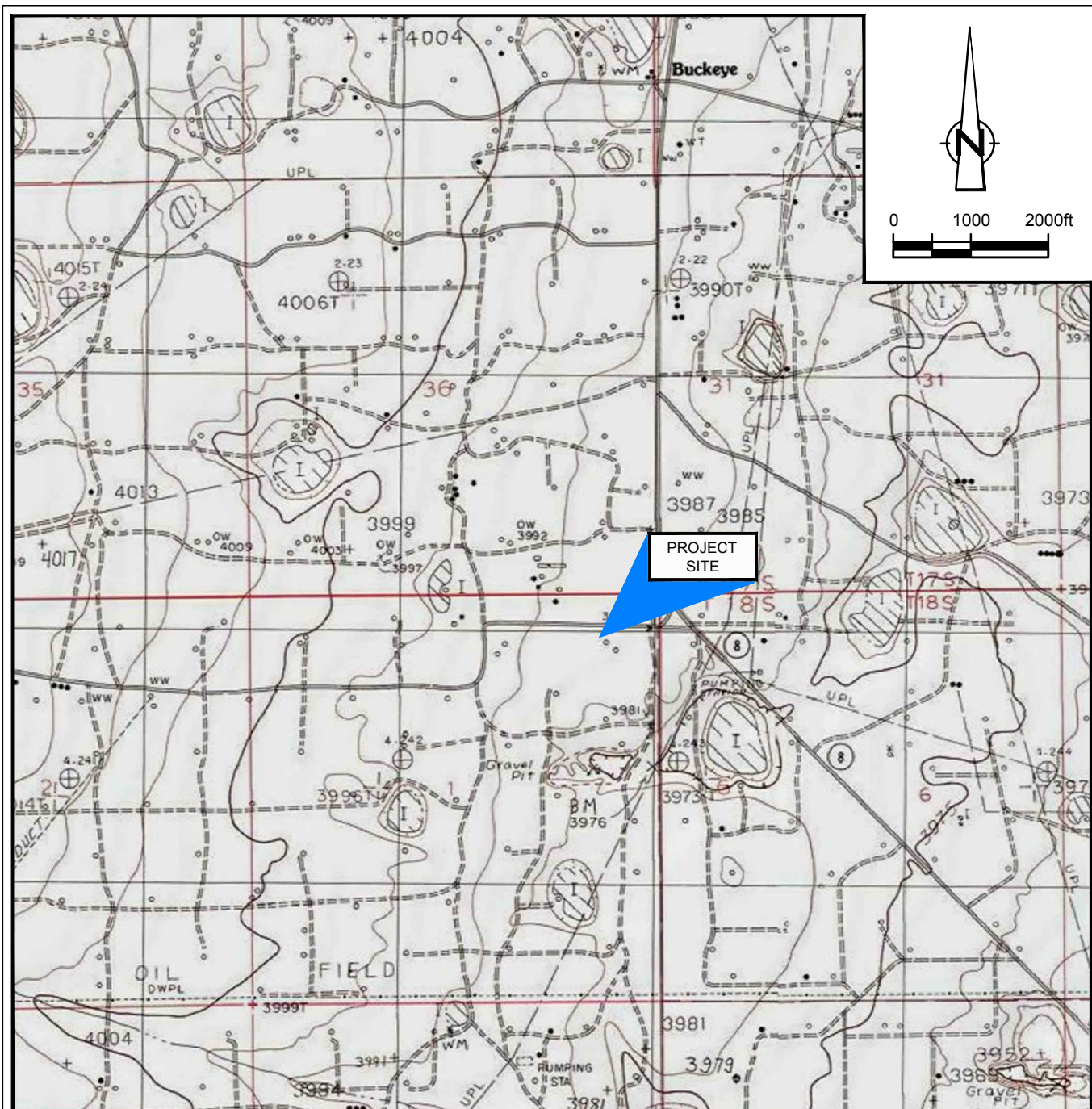
CRA plans to conduct four quarterly groundwater gauging and sampling events in 2014. Monitor wells TW-9, TW-10, TW-13, TW-14, TW-20 and recovery wells RW-2 and RW-3 are included in the quarterly monitoring plan. Additional monitoring wells may be incorporated into the program for 2014 as

approved by CEMC. TW-9 and T-20 will be monitored until TW-10 again demonstrates downgradient delineation of the contaminant plumes. Monitoring will include measurements of fluid levels and collection of groundwater samples. Dissolved chloride and TDS in the wells will be analyzed according to analytical methods EPA300.0 and SM2540C, respectively.

Withdrawal of groundwater from RW-3 will continue for use in the water flood system of the Chevron Buckeye Vacuum Field Production Unit. A pump test will be conducted in RW-3 to determine the extent to which groundwater removal can be increased to further reduce dissolved chloride and TDS concentrations in RW-3 and the surrounding area.

Results of the four quarterly groundwater monitoring events at the Site during 2014 will be summarized in an annual report for submission to the NMOCD. The report will include tabulated data from gauging activities, tabulated results of chemical analyses, maps of groundwater gradients, maps of concentrations of chemicals of concern for each monitoring event and recommendations to expedite the site toward closure. Activities conducted to determine the potential to increase the volume of groundwater pumped from RW-3 will be evaluated and reported to CEMC.

## FIGURES



SOURCE: USGS 7.5 MINUTE QUADS  
"BUCKEYE AND LOVINGTON SW, NEW MEXICO"

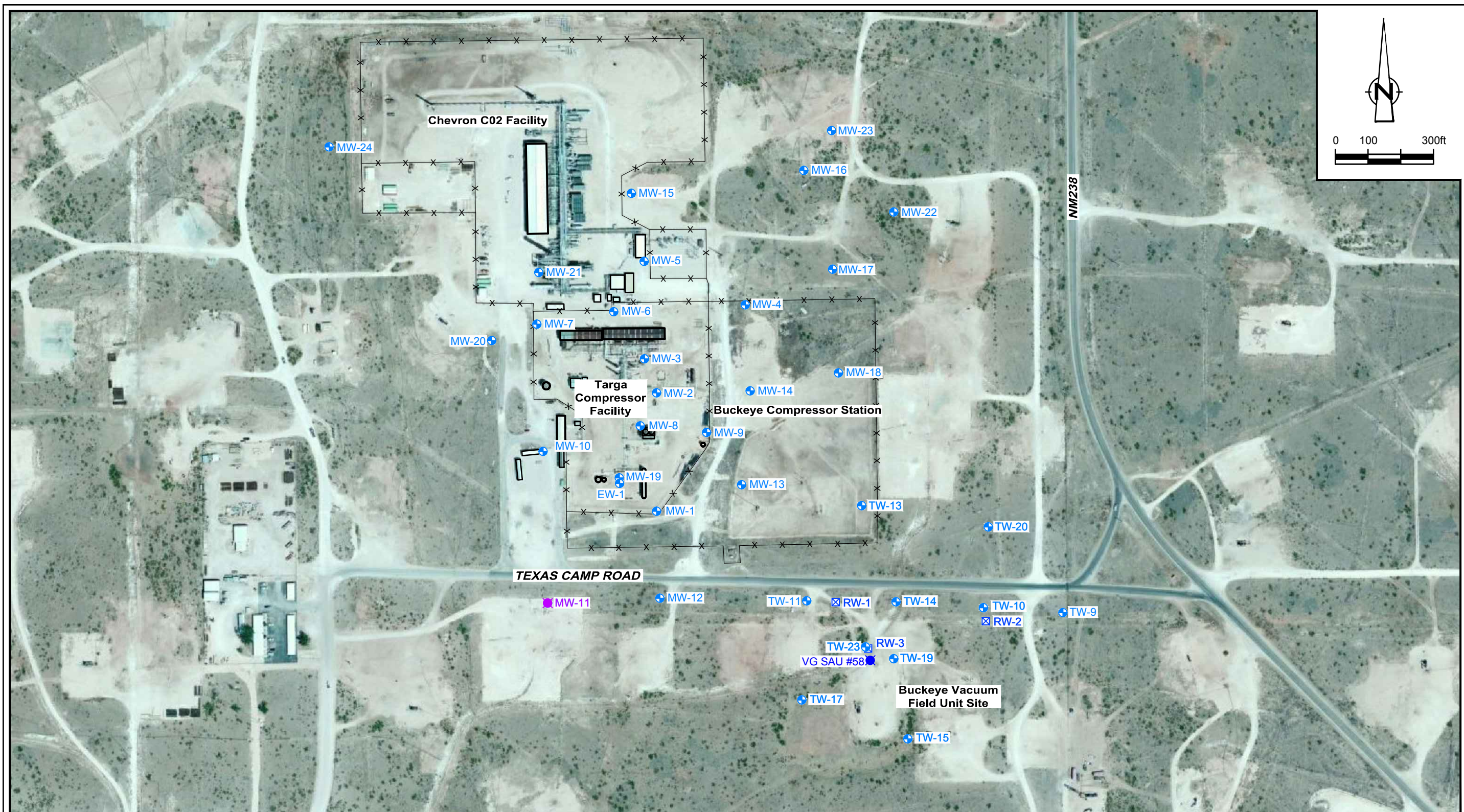
LAT/LONG: 32.786° NORTH, 103.510° WEST  
COORDINATE: NAD83 DATUM, U.S. FOOT  
STATE PLANE ZONE - NEW MEXICO EAST

figure 1

SITE LOCATION MAP  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1, T18S-R34E, LEA COUNTY, NEW MEXICO  
*Chevron Environmental Management Company*





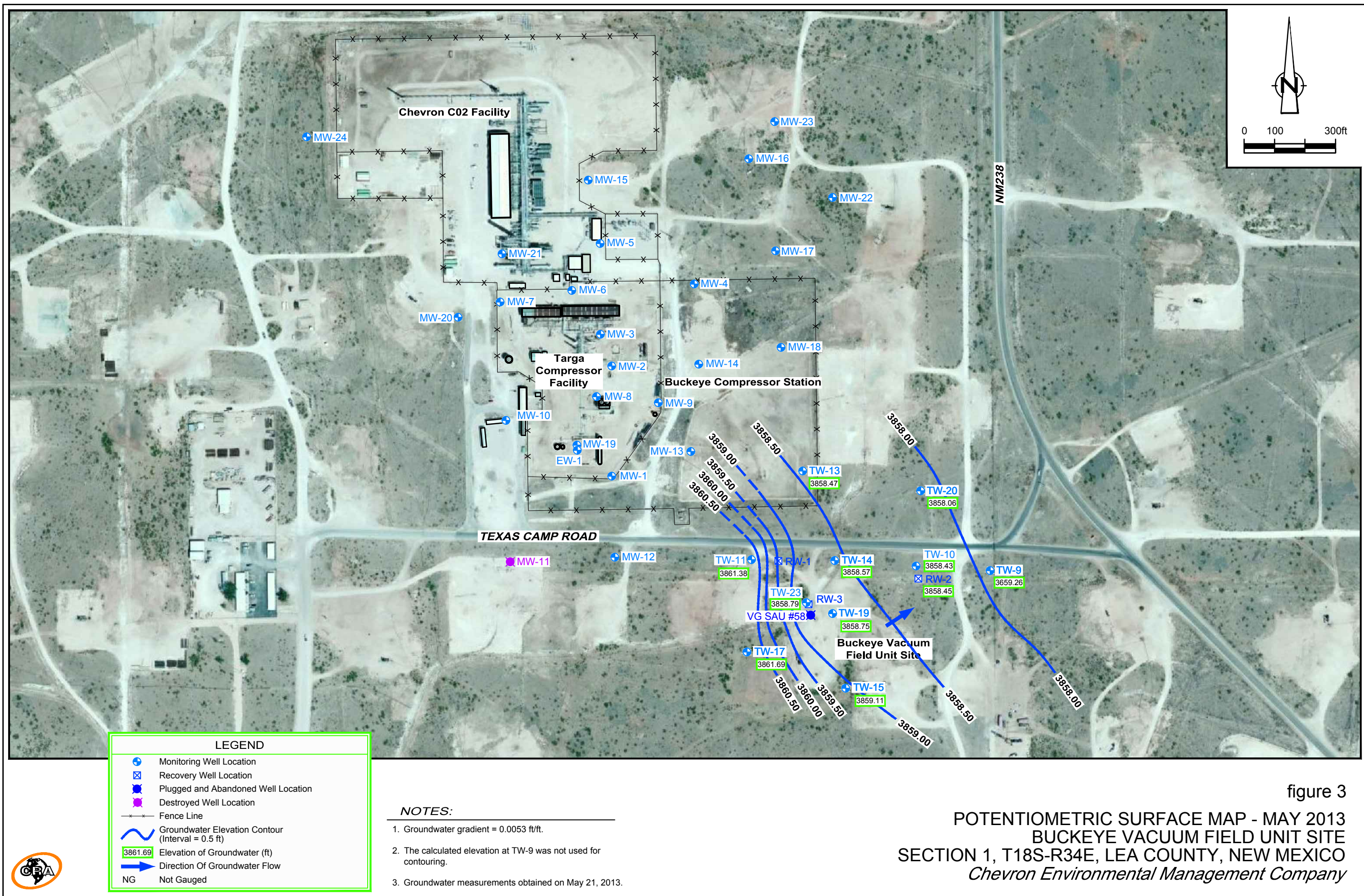


LEGEND	
	Monitoring Well Location
	Recovery Well Location
	Plugged and Abandoned Well Location
	Destroyed Well Location
	Fence Line

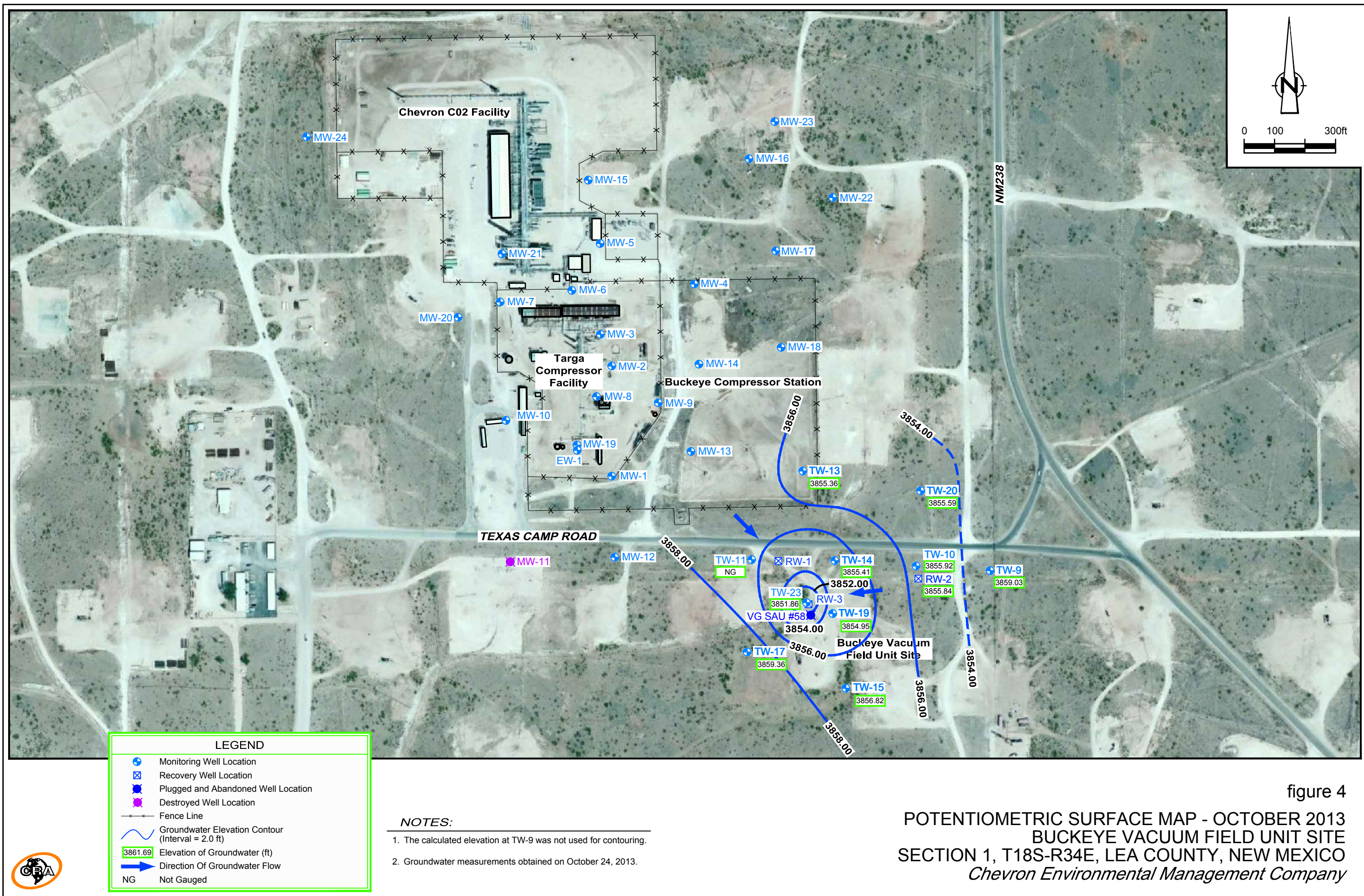
figure 2  
 SITE DETAILS MAP  
 BUCKEYE VACUUM FIELD UNIT SITE  
 SECTION 1, T18S-R34E, LEA COUNTY, NEW MEXICO  
*Chevron Environmental Management Company*



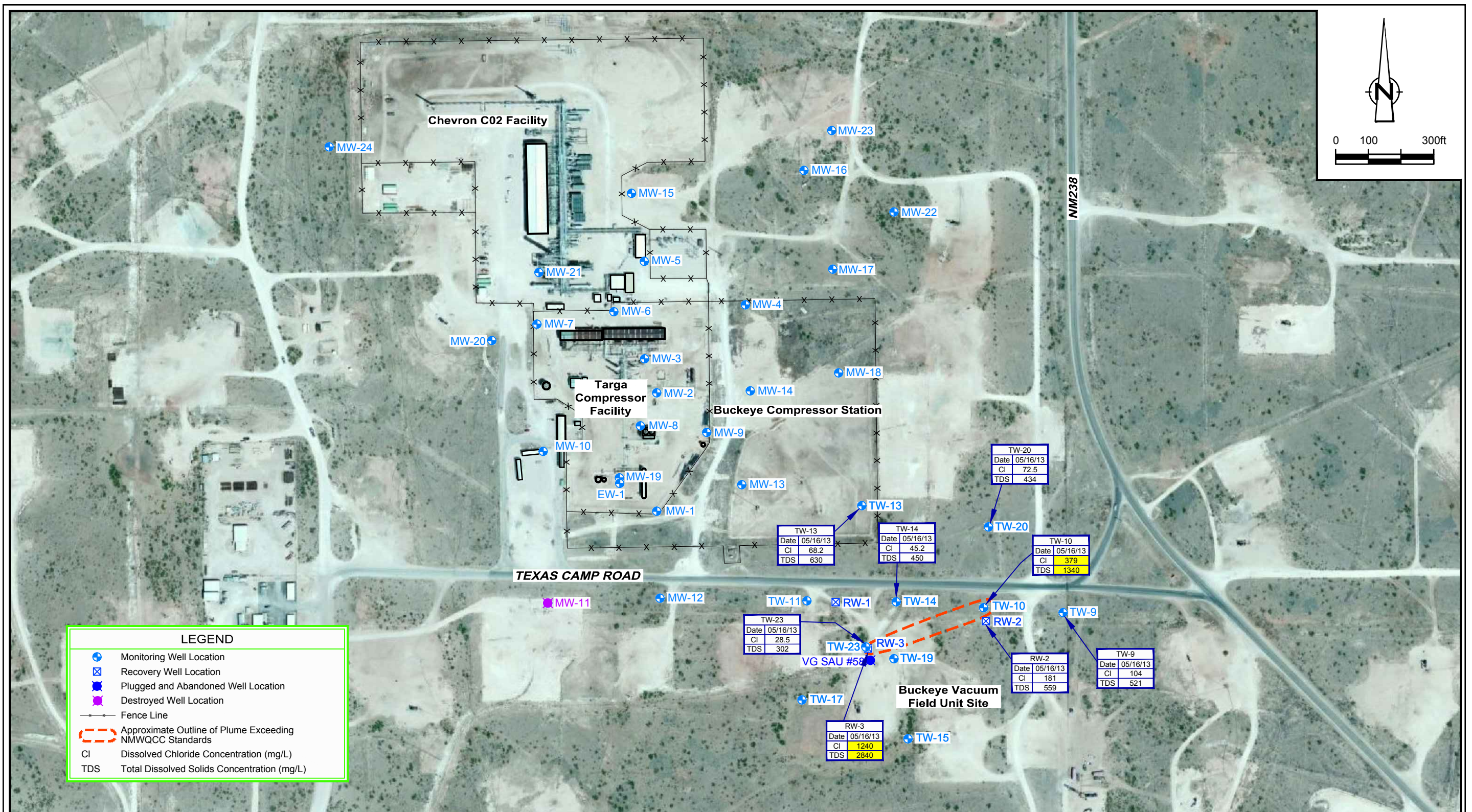












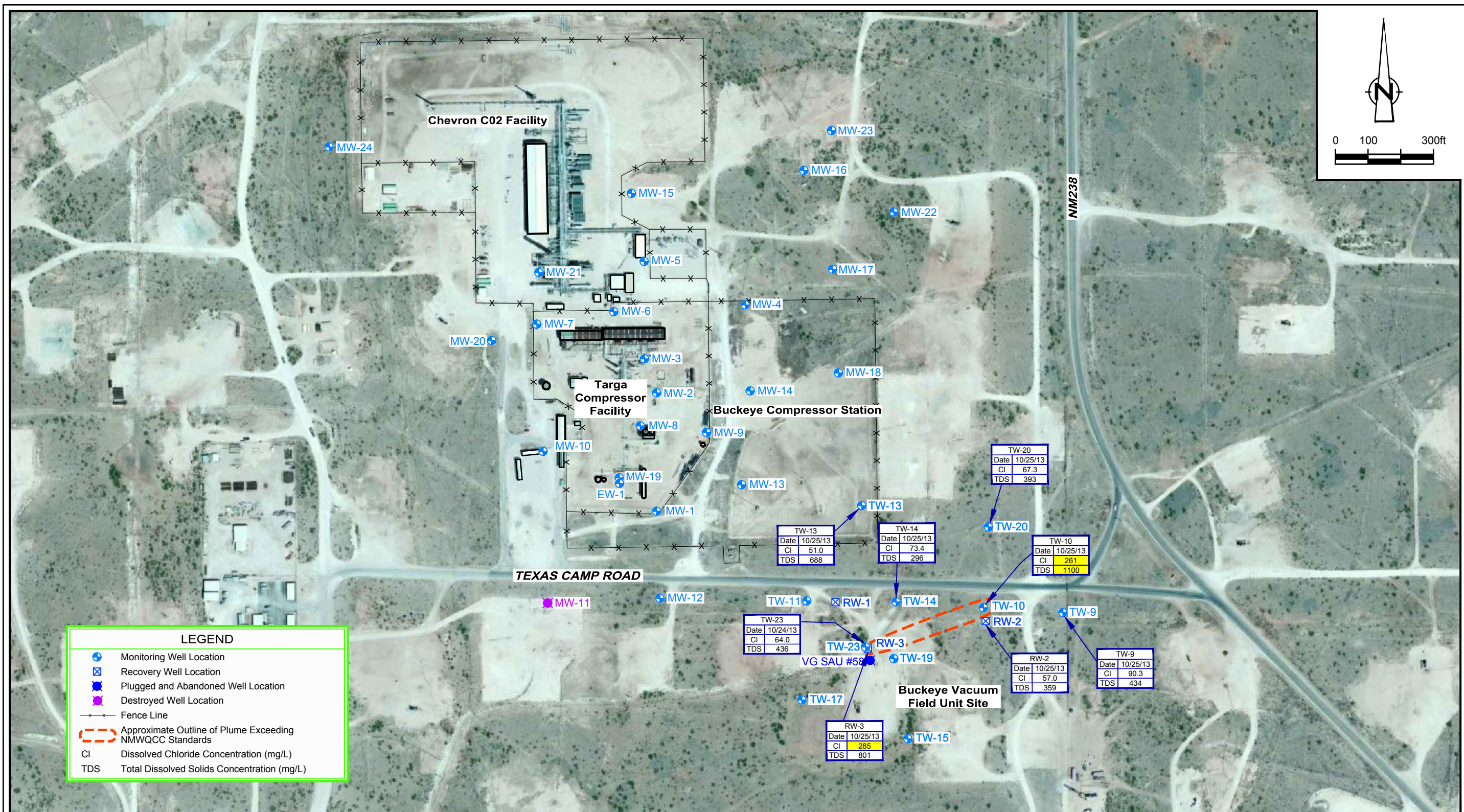
**NOTE:**

Concentrations shaded in yellow exceed corresponding standard or guideline.

figure 5  
DISSOLVED CHLORIDE AND TOTAL DISSOLVED SOLIDS CONCENTRATION MAP - MAY 2013  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1, T18S-R34E, LEA COUNTY, NEW MEXICO  
Chevron Environmental Management Company







**NOTE:**

Concentrations shaded in yellow exceed corresponding standard or guideline.

figure 6  
DISSOLVED CHLORIDE AND TOTAL DISSOLVED SOLIDS CONCENTRATION MAP - OCTOBER 2013  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1, T18S-R34E, LEA COUNTY, NEW MEXICO  
Chevron Environmental Management Company





## TABLES

**TABLE 1**

**2013 FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i><b>Monitoring Well ID</b></i>	<i><b>Date Gauged</b></i>	<i><b>Elevation of TOC (famsl)</b></i>	<i><b>Depth To Water (fbtoc)</b></i>	<i><b>Elevation of Potentiometric Surface (famsl)</b></i>
TW-9	05/15/13	3988.69	129.43	3859.26
	10/24/13	3988.69	129.66	3859.03
TW-10	05/15/13	3987.87	129.44	3858.43
	10/24/13	3987.87	131.95	3855.92
TW-11	05/15/13	3989.11	127.73	3861.38
TW-13	05/15/13	3988.73	130.26	3858.47
	10/24/13	3988.73	133.37	3855.36
TW-14	05/15/13	3986.77	128.2	3858.57
	10/24/13	3986.77	131.36	3855.41
TW-15	05/15/13	3984.14	125.03	3859.11
	10/24/13	3984.14	127.32	3856.82
TW-17	05/15/13	3986.01	124.32	3861.69
	10/24/13	3986.01	126.65	3859.36
TW-19	05/15/13	3985.70	126.95	3858.75
	10/24/13	3985.70	130.75	3854.95
TW-20	05/15/13	3988.40	130.34	3858.06
	10/24/13	3988.40	132.81	3855.59
TW-23	05/15/13	3984.58	125.79	3858.79
	10/24/13	3984.58	132.72	3851.86
RW-2	05/15/13	3987.04	128.59	3858.45
	10/24/13	3987.04	131.20	3855.84
RW-3	05/15/13	NG	Not gauged--pump in well	
	10/24/13	NG	Not gauged--pump in well	

**Notes:**

1. TOC--top of casing
2. famsl--feet above mean sea level
3. fbtoc--feet below top of casing
4. NG--not gauged

TABLE 2

**2013 GROUNDWATER ANALYTICAL RESULTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Chloride (mg/L)</i>	<i>Total Dissolved Solids (mg/L)</i>
<b>NMWQCC REMEDIATION STANDARDS (mg/L)</b>		<b>250</b>	<b>1,000</b>
TW-9	05/16/13	104.0	521
	10/25/13	90.3	434
TW-10	05/16/13	379	1340
	10/25/13	261	1100
TW-13	05/16/13	68.2	630
	10/25/13	51	688
TW-14	05/16/13	45.2	450
	10/25/13	73.4	296
TW-20	05/16/13	72.5	434
	10/25/13	67.3	393
TW-23	05/16/13	28.5	302
	10/24/13	64	436
RW-2	05/16/13	181.0	559
	10/25/13	57.0	359
RW-3	05/16/13	1,240	2,840
DUP	05/13/13	1250	2130
	10/25/13	285	801
Dup -1	10/25/13	287	810

## NOTES:

1. TOC--top of casing
2. mg/L--milligrams per liter
3. NMWQCC--New Mexico Water Quality Control Commission
4. NA--Not analyzed
5. Cells shaded yellow indicates concentration that exceeds NMWQCC standards

## Appendix A

TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
TW-9	05/15/03	3988.69	129.01	3859.68
TW-9	11/18/03	3988.69	128.97	3859.72
TW-9	02/11/04	3988.69	128.62	3860.07
TW-9	05/27/04	3988.69	128.65	3860.04
TW-9	08/06/04	3988.69	128.64	3860.05
TW-9	03/03/05	3988.69	127.79	3860.90
TW-9	05/09/05	3988.69	128.67	3860.02
TW-9	11/01/05	3988.69	128.62	3860.07
TW-9	01/12/06	3988.69	129.05	3859.64
TW-9	04/03/06	3988.69	129.55	3859.14
TW-9	09/06/06	3988.69	129.20	3859.49
TW-9	10/03/06	3988.69	129.15	3859.54
TW-9	01/31/07	3988.69	126.39	3862.30
TW-9	04/23/07	3988.69	129.10	3859.59
TW-9	08/06/07	3988.69	128.98	3859.71
TW-9	10/02/07	3988.69	128.81	3859.88
TW-9	02/20/08	3988.69	128.92	3859.77
TW-9	05/21/08	3988.69	128.81	3859.88
TW-9	08/14/08	3988.69	129.58	3859.11
TW-9	10/09/08	3988.69	128.99	3859.70
TW-9	01/19/09	3988.69	130.05	3858.64
TW-9	04/09/09	3988.69	130.26	3858.43
TW-9	07/06/09	3988.69	130.36	3858.33
TW-9	09/28/09	3988.69	131.00	3857.69
TW-9	04/05/10	3988.69	131.10	3857.59
TW-9	10/04/10	3988.69	131.89	3856.80
TW-9	04/12/11	3988.69	132.28	3856.41
TW-9	04/10/12	3988.69	131.09	3857.60
TW-9	10/18/12	3988.69	127.89	3860.80
TW-9	05/15/13	3988.69	129.43	3859.26
TW-9	10/24/13	3988.69	129.66	3859.03
TW-10	05/15/03	3987.87	127.99	3859.88
TW-10	11/19/03	3987.87	128.11	3859.76
TW-10	02/11/04	3987.87	127.69	3860.18
TW-10	05/28/04	3987.87	127.66	3860.21
TW-10	08/06/04	3987.87	127.69	3860.18
TW-10	03/03/05	3987.87	126.80	3861.07
TW-10	05/09/05	3987.87	126.68	3861.19
TW-10	11/01/05	3987.87	127.54	3860.33
TW-10	04/03/06	3987.87	128.47	3859.40
TW-10	10/03/06	3987.87	128.17	3859.70
TW-10	04/23/07	3987.87	128.14	3859.73
TW-10	10/02/07	3987.87	127.86	3860.01
TW-10	05/21/08	3987.87	127.89	3859.98

TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
TW-10	10/09/08	3987.87	128.09	3859.78
TW-10	04/09/09	3987.87	129.02	3858.85
TW-10	09/28/09	3987.87	129.76	3858.11
TW-10	04/05/10	3987.87	129.92	3857.95
TW-10	10/04/10	3987.87	130.41	3857.46
TW-10	04/12/11	3987.87	130.95	3856.92
TW-10	10/17/11	3987.87	132.12	3855.75
TW-10	04/10/12	3987.87	130.01	3857.86
TW-10	10/18/12	3987.87	129.78	3858.09
TW-10	05/15/13	3987.87	129.44	3858.43
TW-10	10/24/13	3987.87	131.95	3855.92
TW-11	05/15/03	3989.11	128.97	3860.14
TW-11	11/19/03	3989.11	129.14	3859.97
TW-11	02/11/04	3989.11	128.67	3860.44
TW-11	05/28/04	3989.11	128.39	3860.72
TW-11	08/05/04	3989.11	128.42	3860.69
TW-11	03/03/05	3989.11	127.56	3861.55
TW-11	05/09/05	3989.11	127.41	3861.70
TW-11	11/01/05	3989.11	128.11	3861.00
TW-11	04/03/06	3989.11	128.97	3860.14
TW-11	10/03/06	3989.11	128.98	3860.13
TW-11	04/23/07	3989.11	128.94	3860.17
TW-11	10/02/07	3989.11	128.66	3860.45
TW-11	05/22/08	3989.11	128.69	3860.42
TW-11	10/09/08	3989.11	128.91	3860.20
TW-11	04/09/09	3989.11	129.48	3859.63
TW-11	09/28/09	3989.11	130.01	3859.10
TW-11	04/05/10	3989.11	130.27	3858.84
TW-11	10/04/10	3989.11	130.59	3858.52
TW-11	04/12/11	3989.11	129.95	3859.16
TW-11	10/18/11	3989.11	131.46	3857.65
TW-11	04/10/12	3989.11	130.71	3858.40
TW-11	10/18/12	3989.11	127.80	3861.31
TW-11	05/15/13	3989.11	127.73	3861.38
TW-13	05/15/03	3988.73	128.85	3859.88
TW-13	11/18/03	3988.73	128.89	3859.84
TW-13	02/11/04	3988.73	128.67	3860.06
TW-13	05/27/04	3988.73	128.67	3860.06
TW-13	08/06/04	3988.73	128.66	3860.07
TW-13	03/03/05	3988.73	127.74	3860.99
TW-13	05/09/05	3988.73	127.68	3861.05
TW-13	11/01/05	3988.73	128.43	3860.30
TW-13	04/03/06	3988.73	129.31	3859.42

TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
TW-13	10/03/06	3988.73	129.13	3859.60
TW-13	04/23/07	3988.73	129.00	3859.73
TW-13	10/02/07	3988.73	128.76	3859.97
TW-13	05/21/08	3988.73	128.86	3859.87
TW-13	10/09/08	3988.73	128.96	3859.77
TW-13	04/09/09	3988.73	129.70	3859.03
TW-13	09/28/09	3988.73	130.32	3858.41
TW-13	04/05/10	3988.73	130.56	3858.17
TW-13	10/04/10	3988.73	130.91	3857.82
TW-13	04/12/11	3988.73	131.45	3857.28
TW-13	10/17/11	3988.73	131.67	3857.06
TW-13	10/18/11	3988.73	131.57	3857.16
TW-13	04/10/12	3988.73	130.80	3857.93
TW-13	10/18/12	3988.73	130.55	3858.18
TW-13	05/15/13	3988.73	130.26	3858.47
TW-13	10/24/13	3988.73	133.37	3855.36
TW-14	05/15/03	3986.77	126.78	3859.99
TW-14	11/19/03	3986.77	127.28	3859.49
TW-14	02/11/04	3986.77	127.32	3859.45
TW-14	05/28/04	3986.77	126.44	3860.33
TW-14	08/05/04	3986.77	126.48	3860.29
TW-14	03/03/05	3986.77	125.55	3861.22
TW-14	05/09/05	3986.77	125.43	3861.34
TW-14	11/01/05	3986.77	126.24	3860.53
TW-14	04/03/06	3986.77	127.09	3859.68
TW-14	10/03/06	3986.77	127.05	3859.72
TW-14	04/23/07	3986.77	127.04	3859.73
TW-14	10/02/07	3986.77	126.67	3860.10
TW-14	05/22/08	3986.77	126.66	3860.11
TW-14	10/09/08	3986.77	126.98	3859.79
TW-14	04/09/09	3986.77	127.56	3859.21
TW-14	09/28/09	3986.77	128.22	3858.55
TW-14	04/05/10	3986.77	128.45	3858.32
TW-14	10/04/10	3986.77	128.77	3858.00
TW-14	04/12/11	3986.77	129.42	3857.35
TW-14	10/17/11	3986.77	129.75	3857.02
TW-14	04/10/12	3986.77	128.73	3858.04
TW-14	10/18/12	3986.77	128.48	3858.29
TW-14	05/15/13	3986.77	128.2	3858.57
TW-14	10/24/13	3986.77	131.36	3855.41
TW-15	05/15/03	3984.14	123.50	3860.64
TW-15	11/19/03	3984.14	123.76	3860.38
TW-15	02/11/04	3984.14	123.34	3860.80



TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
TW-15	05/27/04	3984.14	123.06	3861.08
TW-15	08/05/04	3984.14	123.07	3861.07
TW-15	03/03/05	3984.14	122.18	3861.96
TW-15	05/09/05	3984.14	122.13	3862.01
TW-15	11/01/05	3984.14	122.68	3861.46
TW-15	01/12/06	3984.14	123.33	3860.81
TW-15	04/03/06	3984.14	123.65	3860.49
TW-15	09/06/06	3984.14	123.61	3860.53
TW-15	10/03/06	3984.14	123.59	3860.55
TW-15	01/31/07	3984.14	123.33	3860.81
TW-15	04/23/07	3984.14	123.59	3860.55
TW-15	08/06/07	3984.14	123.58	3860.56
TW-15	10/02/07	3984.14	123.24	3860.90
TW-15	02/20/08	3984.14	123.40	3860.74
TW-15	05/21/08	3984.14	123.39	3860.75
TW-15	08/14/08	3984.14	123.77	3860.37
TW-15	10/09/08	3984.14	123.64	3860.50
TW-15	01/19/09	3984.14	124.03	3860.11
TW-15	04/09/09	3984.14	124.29	3859.85
TW-15	07/06/09	3984.14	124.28	3859.86
TW-15	09/28/09	3984.14	124.73	3859.41
TW-15	04/05/10	3984.14	125.08	3859.06
TW-15	10/04/10	3984.14	125.21	3858.93
TW-15	04/12/11	3984.14	125.70	3858.44
TW-15	04/10/12	3984.14	125.49	3858.65
TW-15	10/18/12	3984.14	125.05	3859.09
TW-15	05/15/13	3984.14	125.03	3859.11
TW-15	10/24/13	3984.14	127.32	3856.82
TW-17	05/15/03	3986.01	122.87	3863.14
TW-17	11/19/03	3986.01	125.64	3860.37
TW-17	02/11/04	3986.01	125.15	3860.86
TW-17	05/28/04	3986.01	124.89	3861.12
TW-17	08/05/04	3986.01	124.88	3861.13
TW-17	03/03/05	3986.01	124.06	3861.95
TW-17	05/09/05	3986.01	123.97	3862.04
TW-17	11/01/05	3986.01	124.50	3861.51
TW-17	04/03/06	3986.01	125.40	3860.61
TW-17	10/03/06	3986.01	125.45	3860.56
TW-17	04/23/07	3986.01	125.43	3860.58
TW-17	10/02/07	3986.01	125.19	3860.82
TW-17	05/22/08	3986.01	125.20	3860.81
TW-17	10/09/08	3986.01	125.48	3860.53
TW-17	04/09/09	3986.01	126.00	3860.01
TW-17	09/28/09	3986.01	126.51	3859.50

TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
TW-17	04/05/10	3986.01	126.79	3859.22
TW-17	10/04/10	3986.01	126.92	3859.09
TW-17	10/18/12	3986.01	127.01	3859.00
TW-17	05/15/13	3986.01	124.32	3861.69
TW-17	10/24/13	3986.01	126.65	3859.36
TW-19	05/15/03	3985.70	121.80	3863.90
TW-19	11/19/03	3985.70	126.25	3859.45
TW-19	02/11/04	3985.70	125.31	3860.39
TW-19	05/27/04	3985.70	125.11	3860.59
TW-19	08/05/04	3985.70	125.14	3860.56
TW-19	03/03/05	3985.70	124.26	3861.44
TW-19	05/09/05	3985.70	124.02	3861.68
TW-19	11/01/05	3985.70	124.79	3860.91
TW-19	04/03/06	3985.70	125.66	3860.04
TW-19	10/02/06	3985.70	125.78	3859.92
TW-19	04/23/07	3985.70	126.25	3859.45
TW-19	10/02/07	3985.70	125.28	3860.42
TW-19	05/22/08	3985.70	125.34	3860.36
TW-19	10/09/08	3985.70	125.80	3859.90
TW-19	04/09/09	3985.70	126.24	3859.46
TW-19	09/28/09	3985.70	126.84	3858.86
TW-19	04/05/10	3985.70	127.09	3858.61
TW-19	10/04/10	3985.70	127.42	3858.28
TW-19	04/12/11	3985.70	127.90	3857.80
TW-19	04/10/12	3985.70	127.50	3858.20
TW-19	10/18/12	3985.70	127.40	3858.30
TW-19	05/15/13	3985.70	126.95	3858.75
TW-19	10/24/13	3985.70	130.75	3854.95
TW-20	05/15/03	3988.40	129.07	3859.33
TW-20	11/18/03	3988.40	128.93	3859.47
TW-20	02/11/04	3988.40	128.69	3859.71
TW-20	05/27/04	3988.40	128.69	3859.71
TW-20	08/06/04	3988.40	128.67	3859.73
TW-20	03/03/05	3988.40	127.79	3860.61
TW-20	05/09/05	3988.40	127.69	3860.71
TW-20	11/01/05	3988.40	128.74	3859.66
TW-20	04/03/06	3988.40	129.59	3858.81
TW-20	10/03/06	3988.40	129.20	3859.20
TW-20	04/23/07	3988.40	129.12	3859.28
TW-20	10/02/07	3988.40	128.84	3859.56
TW-20	05/21/08	3988.40	128.84	3859.56
TW-20	10/09/08	3988.40	128.98	3859.42
TW-20	04/09/09	3988.40	130.15	3858.25

TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
TW-20	09/28/09	3988.40	130.97	3857.43
TW-20	04/05/10	3988.40	131.01	3857.39
TW-20	10/04/10	3988.40	131.66	3856.74
TW-20	04/12/11	3988.40	132.13	3856.27
TW-20	10/18/12	3988.40	130.61	3857.79
TW-20	05/15/13	3988.40	130.34	3858.06
TW-20	10/24/13	3988.40	132.81	3855.59
TW-23	05/15/03	3984.58	124.42	3860.16
TW-23	11/19/03	3984.58	125.95	3858.63
TW-23	02/11/04	3984.58	124.16	3860.42
TW-23	05/27/04	3984.58	123.94	3860.64
TW-23	08/05/04	3984.58	124.03	3860.55
TW-23	03/03/05	3984.58	123.10	3861.48
TW-23	05/09/05	3984.58	122.98	3861.60
TW-23	11/01/05	3984.58	123.71	3860.87
TW-23	01/12/06	3984.58	124.06	3860.52
TW-23	04/03/06	3984.58	124.52	3860.06
TW-23	09/06/06	3984.58	124.52	3860.06
TW-23	10/02/06	3984.58	124.81	3859.77
TW-23	01/31/07	3984.58	124.12	3860.46
TW-23	04/23/07	3984.58	126.02	3858.56
TW-23	08/06/07	3984.58	124.64	3859.94
TW-23	10/02/07	3984.58	124.20	3860.38
TW-23	02/20/08	3984.58	124.19	3860.39
TW-23	05/22/08	3984.58	124.25	3860.33
TW-23	08/14/08	3984.58	124.76	3859.82
TW-23	10/09/08	3984.58	124.85	3859.73
TW-23	01/19/09	3984.58	125.21	3859.37
TW-23	04/09/09	3984.58	125.09	3859.49
TW-23	07/06/09	3984.58	125.14	3859.44
TW-23	09/28/09	3984.58	125.67	3858.91
TW-23	04/05/10	3984.58	125.90	3858.68
TW-23	10/04/10	3984.58	126.14	3858.44
TW-23	04/12/11	3984.58	126.62	3857.96
TW-23	05/15/13	3984.58	125.79	3858.79
TW-23	10/24/13	3984.58	132.72	3851.86
RW-2	05/15/03	3987.04	Not gauged--pump in well	
RW-2	11/18/03	3987.04	Not gauged--pump in well	
RW-2	02/11/04	3987.04	Not gauged--pump in well	
RW-2	05/28/04	3987.04	126.82	3860.22
RW-2	08/06/04	3987.04	126.81	3860.23
RW-2	03/03/05	3987.04	126.90	3860.14
RW-2	05/09/05	3987.04	125.84	3861.20

TABLE 1

**CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENTS  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Date Gauged</i>	<i>Elevation of TOC (famsl)</i>	<i>Depth To Water (fbtoc)</i>	<i>Elevation of Potentiometric Surface (famsl)</i>
RW-2	11/01/05	3987.04	Not gauged--pump in well	
RW-2	04/03/06	3987.04	127.61	3859.43
RW-2	10/03/06	3987.04	127.33	3859.71
RW-2	04/23/07	3987.04	127.40	3859.64
RW-2	10/02/07	3987.04	126.97	3860.07
RW-2	05/21/08	3987.04	127.02	3860.02
RW-2	10/09/08	3987.04	127.25	3859.79
RW-2	04/09/09	3987.04	128.25	3858.79
RW-2	09/28/09	3987.04	128.93	3858.11
RW-2	04/05/10	3987.04	129.06	3857.98
RW-2	10/04/10	3987.04	129.56	3857.48
RW-2	05/15/13	3987.04	128.59	3858.45
RW-2	10/24/13	3987.04	131.20	3855.84
RW-3	05/15/03	NG	Not gauged--pump in well	
RW-3	11/18/03	NG	Not gauged--pump in well	
RW-3	02/11/04	NG	Not gauged--pump in well	
RW-3	05/27/04	3984.18	123.50	3860.68
RW-3	08/06/04	3984.18	123.58	3860.60
RW-3	03/03/05	3984.18	122.67	3861.51
RW-3	05/09/05	3984.18	122.54	3861.64
RW-3	11/01/05	3984.18	126.72	3857.46
RW-3	04/03/06	NG	Not gauged--pump in well	
RW-3	10/03/06	NG	Not gauged--pump in well	
RW-3	05/22/08	NG	Not gauged--pump in well	
RW-3	10/09/08	NG	Not gauged--pump in well	
RW-3	04/09/08	NG	Not gauged--pump in well	
RW-3	09/28/09	NG	Not gauged--pump in well	
RW-3	04/05/10	NG	Not gauged--pump in well	
RW-3	10/04/10	NG	Not gauged--pump in well	
RW-3	04/12/11	NG	Not gauged--pump in well	
RW-3	10/18/11	NG	Not gauged--pump in well	
RW-3	04/10/12	NG	Not gauged--pump in well	
RW-3	10/18/12	NG	Not gauged--pump in well	
RW-3	05/15/13	NG	Not gauged--pump in well	
RW-3	10/24/13	NG	Not gauged--pump in well	

## Notes:

1. TOC--top of casing
2. famsl--feet above mean sea level
3. fbtoc--feet below top of casing
4. NG--not gauged

## Appendix B

TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i>	<i>Total Dissolved Solids (mg/L)</i>
			<i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<b>1,000</b>
TW-9	05/15/03		120	
TW-9	11/18/03		442	892
TW-9	02/11/04		420	972
TW-9	05/27/04		88.2	461
TW-9	08/06/04		49.0	385
TW-9	03/03/05		44.5	239
TW-9	05/09/05		53.7	378
TW-9	10/27/05		89.9	431
TW-9	01/12/06		49.6	325
TW-9	04/05/06		46.7	321
TW-9	10/02/06		54.5	319
TW-9	01/31/07		73.0	309
TW-9	04/24/07		58.8	324
TW-9	08/06/07		65.2	320
TW-9	10/03/07		54.6	322
TW-9	02/20/08		65.5	342
TW-9	05/21/08		72.5	331
TW-9	08/14/08		78.0	351
TW-9	10/09/08		71.5	371
TW-9	01/19/09		82.6	388
TW-9	04/13/09		76.7	376
TW-9	07/06/09		75.4	417
TW-9	10/01/09		75.4	356
TW-9	10/18/12		108.0	482
TW-9	05/16/13		104.0	521
TW-9	10/25/13		90.3	434
TW-10	05/15/03		44.3	
TW-10	11/19/03		59.1	369
TW-10	02/11/04		52.9	372
TW-10	05/28/04		39.9	344
TW-10	08/06/04		45.4	354
TW-10	03/03/05		33.0	226
TW-10	10/27/05		71.0	372
TW-10	04/05/06		87.4	406
TW-10	10/03/06		66.6	375
TW-10	04/24/07		81.0	389
TW-10	10/03/07		85.6	385
TW-10	05/21/08		88.1	408
TW-10	10/09/08		91.1	456
TW-10	04/13/09		148	532
TW-10	10/01/09		158	622
TW-10	04/05/10		158	
TW-10	10/04/10		181	

TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<i>Total Dissolved Solids (mg/L)</i> <b>1,000</b>
TW-10	04/12/11		282	1070
TW-10	10/18/11	155.00	337	750
TW-10	04/10/12	162.00	302	1080
TW-10	10/18/12		425	1020
TW-10	05/16/13		379	1340
TW-10	10/25/13		261	1100
TW-11	05/15/03		35.4	
TW-11	11/19/03		25.3	307
TW-11	02/11/04		83.8	610
TW-11	05/28/04		27.0	274
TW-11	08/05/04		30.1	269
TW-11	03/03/05		28.4	174
TW-11	10/27/05		31.8	260
TW-11	04/05/06		34.8	269
TW-11	10/03/06		35.1	265
TW-11	04/24/07		42.3	285
TW-11	10/04/07		47.0	388
TW-11	05/22/08		39.3	256
TW-11	10/13/08		33.0	269
TW-11	04/14/09		49.3	270
TW-11	10/01/09		44.3	289
TW-13	05/15/03		39.0	
TW-13	11/18/03		64.3	560
TW-13	02/11/04		83.8	610
TW-13	05/27/04		84.5	625
TW-13	08/06/04		74.8	596
TW-13	03/03/05		90.0	502
TW-13	10/26/05		75.1	485
TW-13	04/06/06		60.3	429
TW-13	10/03/06		93.5	546
TW-13	04/25/07		140	921
TW-13	10/04/07		45.2	892
TW-13	05/21/08		47.1	614
TW-13	10/13/08		81.7	798
TW-13	04/14/09		129	1,000
TW-13	10/01/09		48.5	709
TW-13	04/05/10		92.6	
TW-13	10/04/10		54.7	
TW-13	04/12/11		94.5	976
TW-13	10/18/11	175.00	90.8	698
TW-13	04/10/12	148.00	83.6	796
TW-13	10/18/12		79.5	731

TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<i>Total Dissolved Solids (mg/L)</i> <b>1,000</b>
TW-13	05/16/13		68.2	630
TW-13	10/25/13		51	688
TW-14	05/15/03		65.0	
TW-14	11/19/03		25.4	368
TW-14	02/11/04		29.6	339
TW-14	05/28/04		30.3	346
TW-14	08/05/04		32.7	347
TW-14	03/03/05		87.9	340
TW-14	10/27/05		73.9	419
TW-14	04/05/06		71.1	421
TW-14	10/03/06		69.6	424
TW-14	04/24/07		94.6	444
TW-14	10/04/07		70.7	425
TW-14	05/22/08		85.2	421
TW-14	10/13/08		98.1	463
TW-14	04/14/09		192	600
TW-14	10/01/09		154	727
TW-14	04/05/10		93.8	
TW-14	10/04/10		73.2	
TW-14	04/12/11		65.7	642
TW-14	10/18/11	160.00	33.2	482
TW-14	04/10/12	174.00	40.2	527
TW-14	10/18/12		49.7	525
TW-14	05/16/13		45.2	450
TW-14	10/25/13		73.4	296
TW-15	05/15/03		88.6	
TW-15	11/19/03		561	1,132
TW-15	02/11/04		419	908
TW-15	05/27/04		93.4	439
TW-15	08/05/04		102	545
TW-15	03/03/05		189	577
TW-15	05/09/05		184	711
TW-15	10/27/05		155	569
TW-15	01/12/06		144	486
TW-15	04/05/06		125	557
TW-15	10/02/06		119	503
TW-15	01/31/07		159	480
TW-15	04/25/07		197	594
TW-15	08/06/07		154	502
TW-15	10/04/07		136	636
TW-15	02/20/08		139	502
TW-15	05/21/08		132	483



TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<i>Total Dissolved Solids (mg/L)</i> <b>1,000</b>
TW-15	08/14/08		119	498
TW-15	10/13/08		123	547
TW-15	01/19/09		108	477
TW-15	04/14/09		87.1	446
TW-15	07/06/09		66.5	432
TW-15	10/01/09		59.6	389
TW-17	05/15/03		31.9	
TW-17	11/19/03		26.7	295
TW-17	02/11/04		24.9	294
TW-17	05/28/04		26.7	302
TW-17	08/05/04		29.4	306
TW-17	03/03/05		178	565
TW-17	10/26/05		59.9	362
TW-17	04/05/06		36.1	294
TW-17	10/03/06		29.8	296
TW-17	04/24/07		32.9	311
TW-17	10/04/07		30.8	310
TW-17	05/22/08		31.2	281
TW-17	10/13/08		28.0	303
TW-17	04/14/09		36.8	304
TW-17	10/01/09		30.0	314
TW-17	04/05/10		27.9	
TW-17	10/04/10		16.7	
TW-19	05/15/03		35.4	
TW-19	11/19/03		28.3	325
TW-19	02/11/04		23.7	387
TW-19	05/27/04		33.6	287
TW-19	08/05/04		42.8	344
TW-19	03/03/05		54.2	224
TW-19	10/27/05		39.0	293
TW-19	04/06/06		40.5	308
TW-19	10/02/06		33.2	290
TW-19	04/24/07		37.3	287
TW-19	10/03/07		33.7	293
TW-19	05/22/08		33.5	275
TW-19	10/13/08		28.8	277
TW-19	04/13/09		27.8	278
TW-19	10/01/09		29.5	296
TW-20	05/15/03		35.4	
TW-20	11/18/03		26.5	328
TW-20	02/11/04		25.2	353

TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<i>Total Dissolved Solids (mg/L)</i> <b>1,000</b>
TW-20	05/27/04		27.1	316
TW-20	08/06/04		31.8	338
TW-20	03/03/05		25.3	232
TW-20	10/26/05		53.7	351
TW-20	04/06/06		34.3	329
TW-20	10/03/06		39.4	310
TW-20	04/24/07		38.2	324
TW-20	10/03/07		36.8	340
TW-20	05/21/08		41.7	315
TW-20	10/09/08		38.1	338
TW-20	04/13/09		43.3	330
TW-20	10/01/09		40.5	345
TW-20	10/18/12		60.6	377
TW-20	05/16/13		72.5	434
TW-20	10/25/13		67.3	393
TW-23	05/15/03		1440	
TW-23	11/19/03		300	964
TW-23	02/11/04		117	603
TW-23	05/27/04		617	1,710
TW-23	08/05/04		919	2,000
TW-23	03/03/05		656	1,680
TW-23	05/09/05		835	2,680
TW-23	10/27/05		284	1,460
TW-23	01/12/06		272	1,090
TW-23	04/06/06		35.2	1,070
TW-23	10/02/06		253	1,070
TW-23	01/31/07		144	626
TW-23	04/25/07		346	1,260
TW-23	08/06/07		260	1,030
TW-23	10/03/07		228	1,110
TW-23	02/20/08		196	944
TW-23	05/22/08		317	1,300
TW-23	01/19/09		177	882
TW-23	04/14/09		53.7	456
TW-23	07/06/09		48.2	445
TW-23	10/01/09		42.3	462
TW-23	05/16/13		28.5	302
TW-23	10/24/13		64	436
RW-2	05/28/04		30.4	306
RW-2	08/06/04		34.6	354
RW-2	03/03/05		32.4	244
RW-2	10/27/05		264	600

TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<i>Total Dissolved Solids (mg/L)</i> <b>1,000</b>
RW-2	04/07/06		244	767
RW-2	10/03/06		49.8	325
RW-2	04/25/07		64.3	331
RW-2	10/03/07		58.5	346
RW-2	05/21/08		63.9	350
RW-2	10/09/08		77.0	371
RW-2	04/13/09		82.4	382
RW-2	10/01/09		240.0	691
RW-2	05/16/13		181.0	559
RW-2	10/25/13		57.0	359
RW-3	05/27/04		338	854
RW-3	08/06/04		700	1,620
RW-3	03/03/05		873	1,710
RW-3	10/27/05		298	844
RW-3	04/07/06		791	1,700
RW-3	10/02/06		1,060	1,930
RW-3	04/24/07		1,100	2,090
RW-3	10/03/07		321	902
RW-3	05/22/08		820	1,390
RW-3	10/14/08		847	1,630
RW-3	04/13/09		1,250	2,740
RW-3	10/01/09		1,320	2,850
RW-3	04/05/10		892	
RW-3	10/04/10		1,350	
RW-3	04/12/11		664	1,770
RW-3	10/18/11		392	848
RW-3	10/18/12		1,150	2,910
RW-3	05/16/13		1,240	2,840
RW-3	10/25/13		285	801
Dup-1 (TW-10)	10/04/10		182	
Dup-1 (TW-11)	05/22/08		39.1	253
Dup-1 (TW-11)	10/13/08		39.3	284
Dup-100 (TW-14)	10/11/09		163	714
Dup-#1 (TW-14)	04/05/10		82.2	
Dup-#1 (TW-15)	04/14/09		95.2	450
DUP	05/13/13		1250	2130
Dup-1 (RW-3)	10/25/13		287	810

## NOTES:

1. TOC--top of casing
2. mg/L--milligrams per liter
3. NMWQCC--New Mexico Water Quality Control Commission

TABLE 2

**CUMULATIVE SUMMARY OF ANALYTICAL RESULTS IN GROUNDWATER  
BUCKEYE VACUUM FIELD UNIT SITE  
SECTION 1-T18S-R34E, LEA COUNTY, NM**

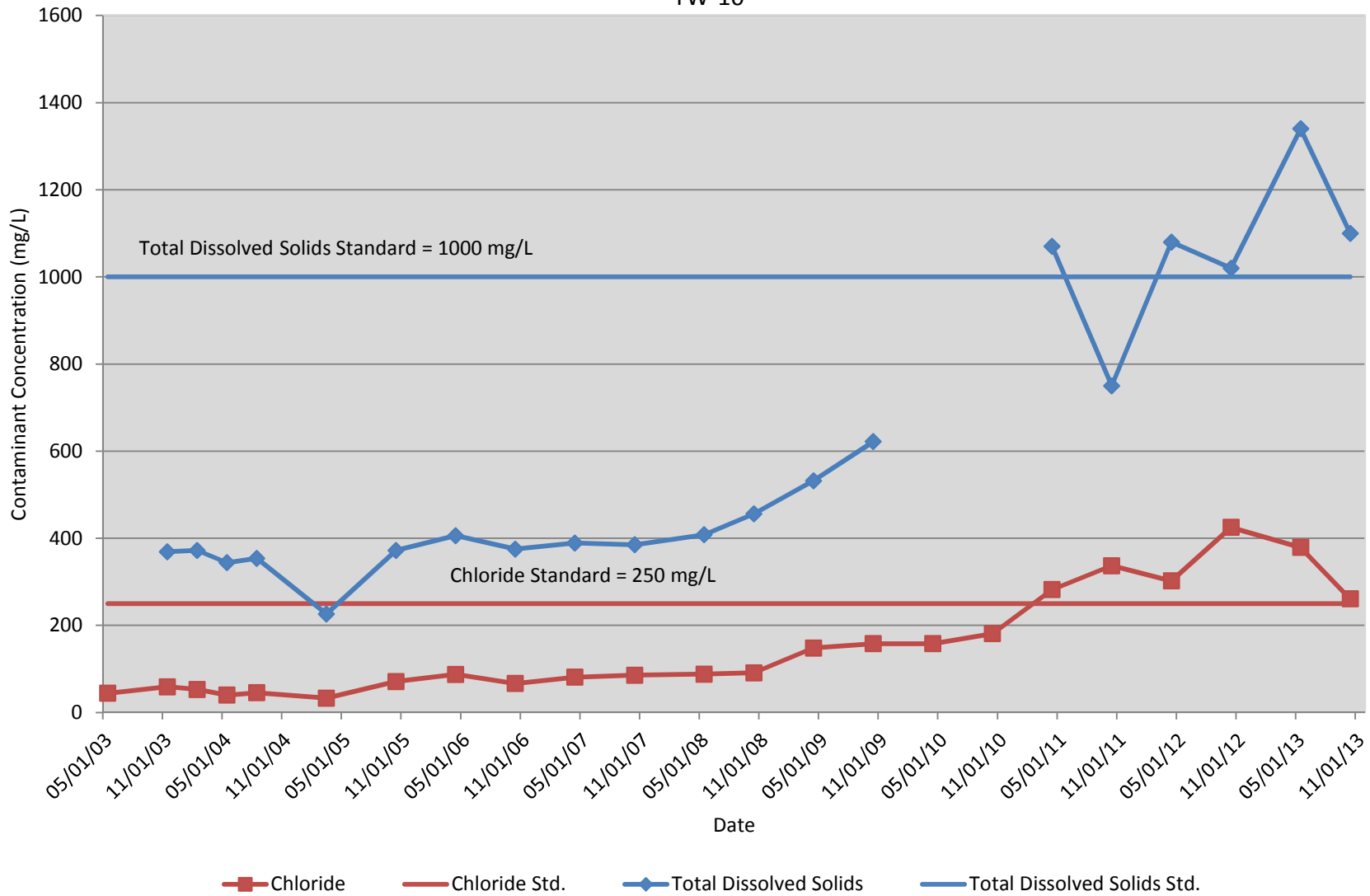
<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Sample Depth ( ft. below TOC)</i>	<i>Chloride (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>250</b>	<i>Total Dissolved Solids (mg/L)</i> <i>NMWQCC Remediation Standards (mg/L)</i> <b>1,000</b>
-------------------------------	--------------------	--	--	--

4. NA--Not analyzed

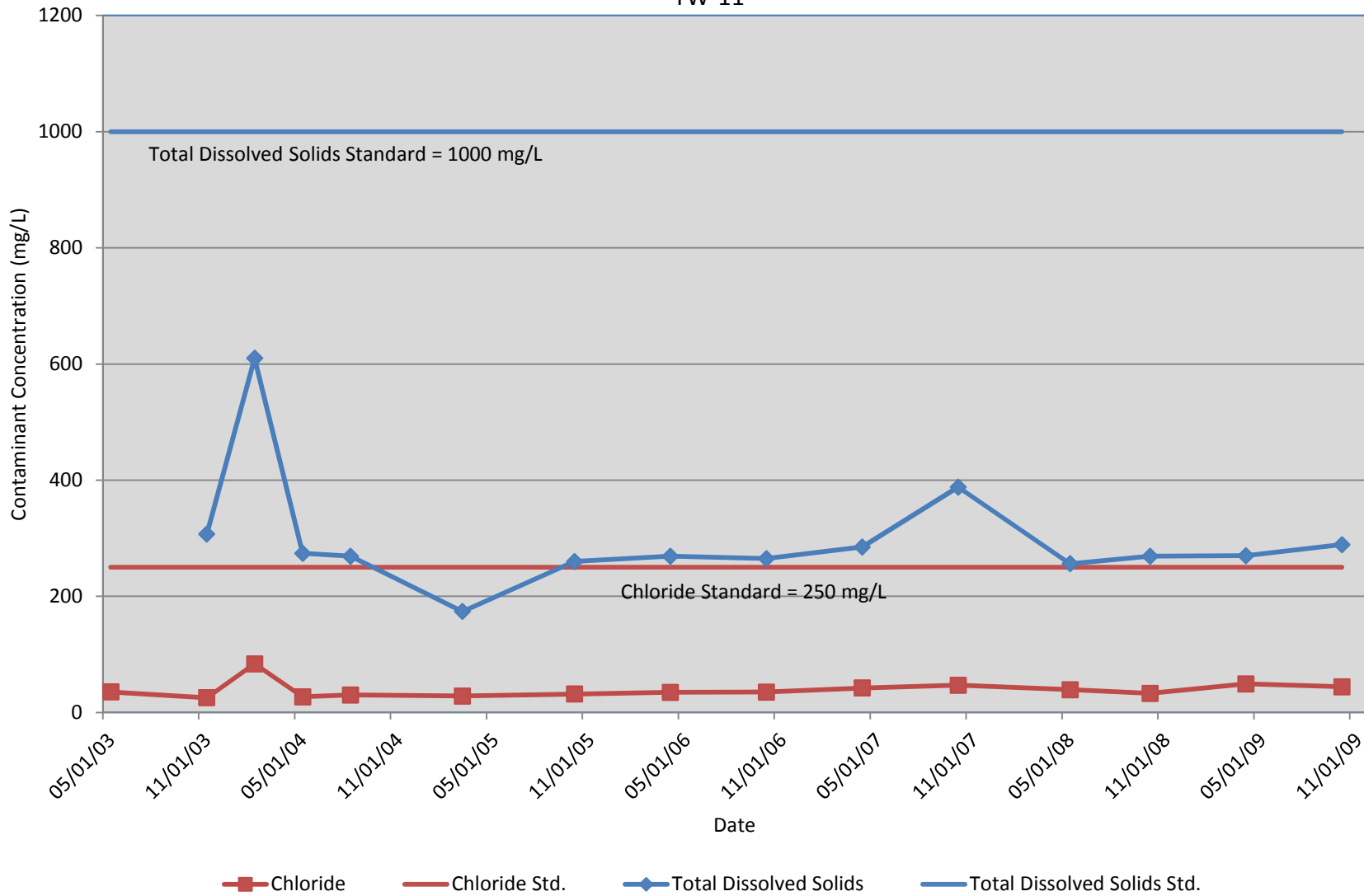
5. Cells shaded yellow indicates concentration that exceeds NMWQCC standards

## Appendix C

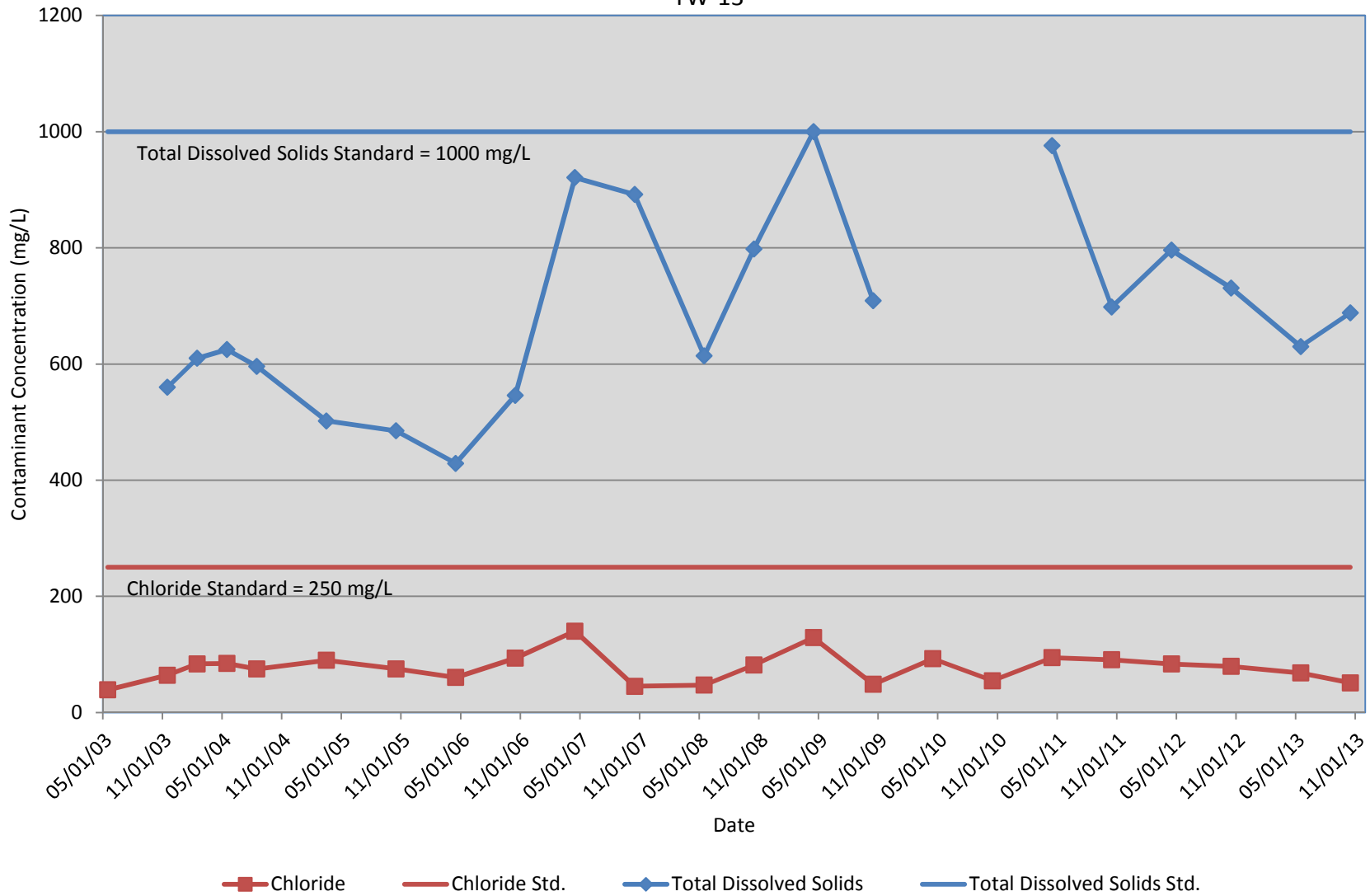
Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-10



Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-11

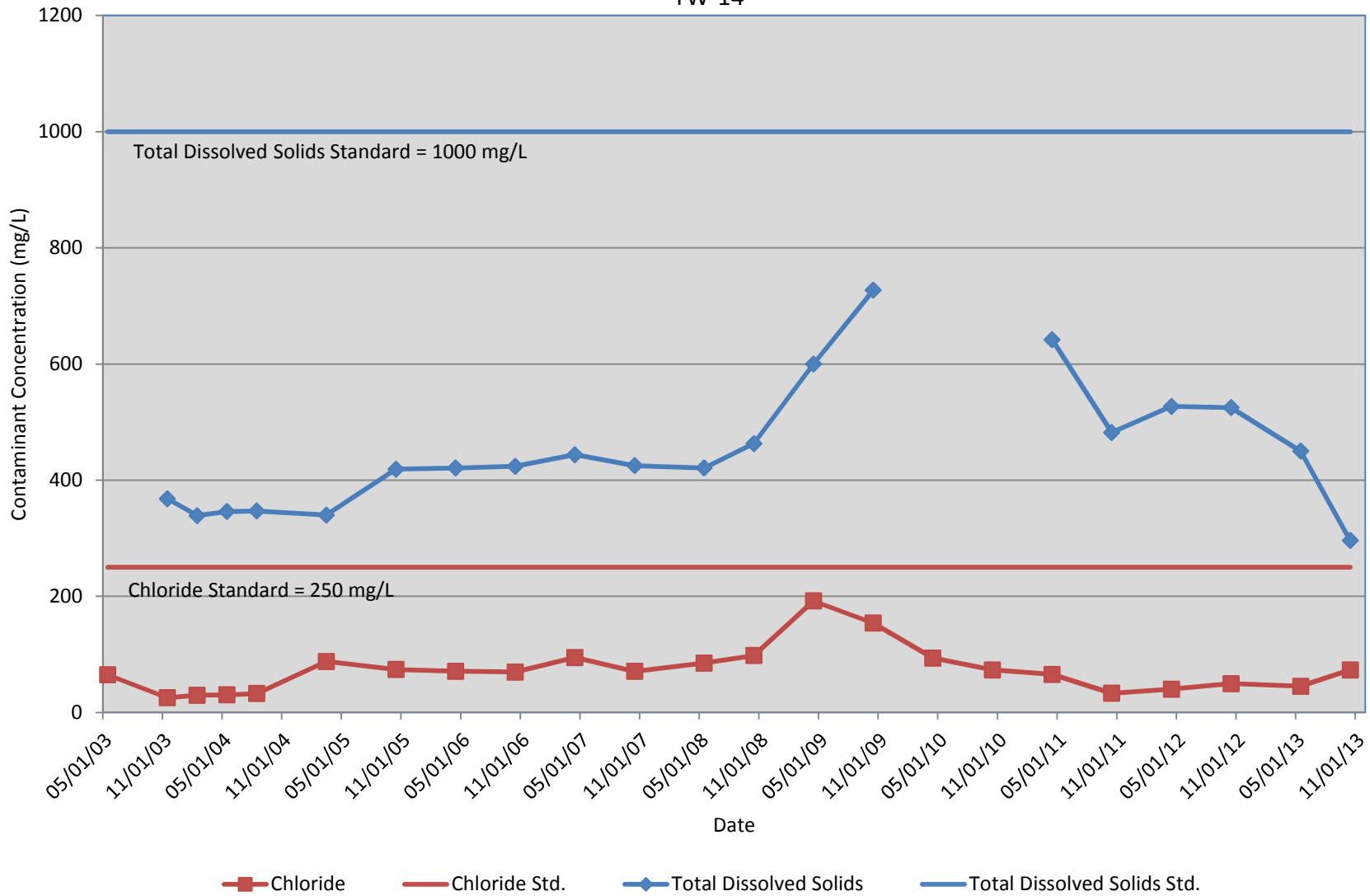


Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-13

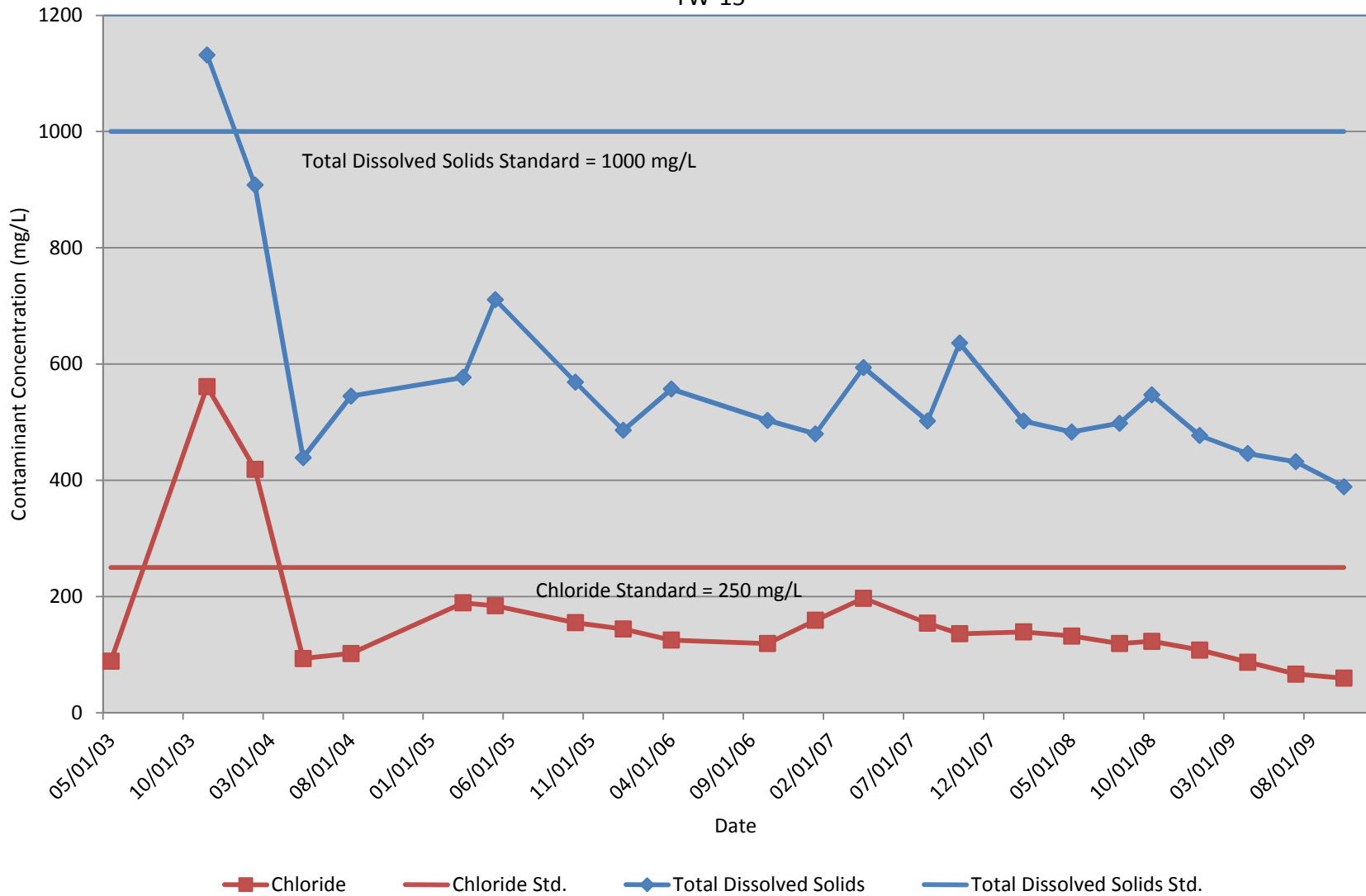




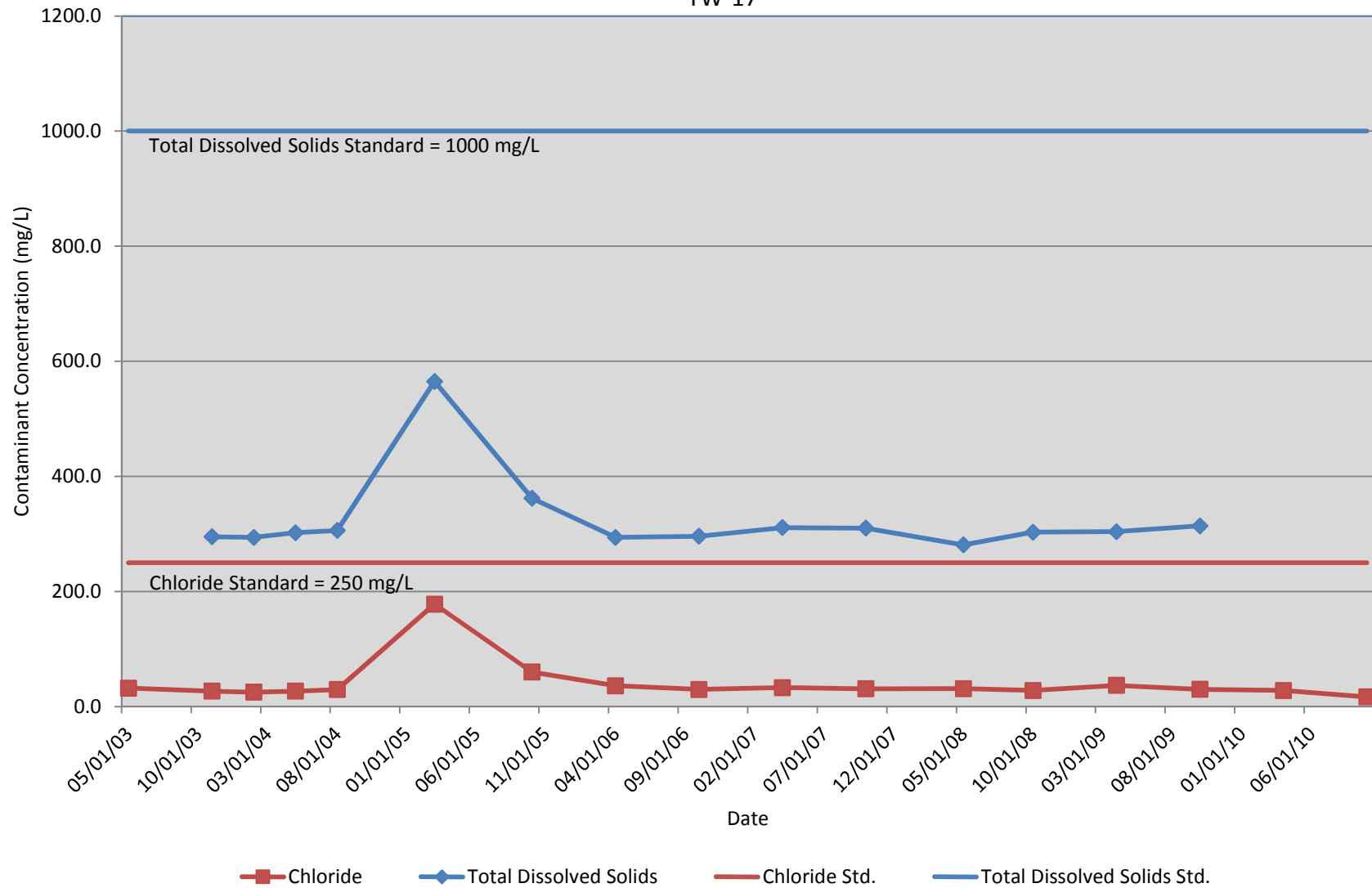
Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-14



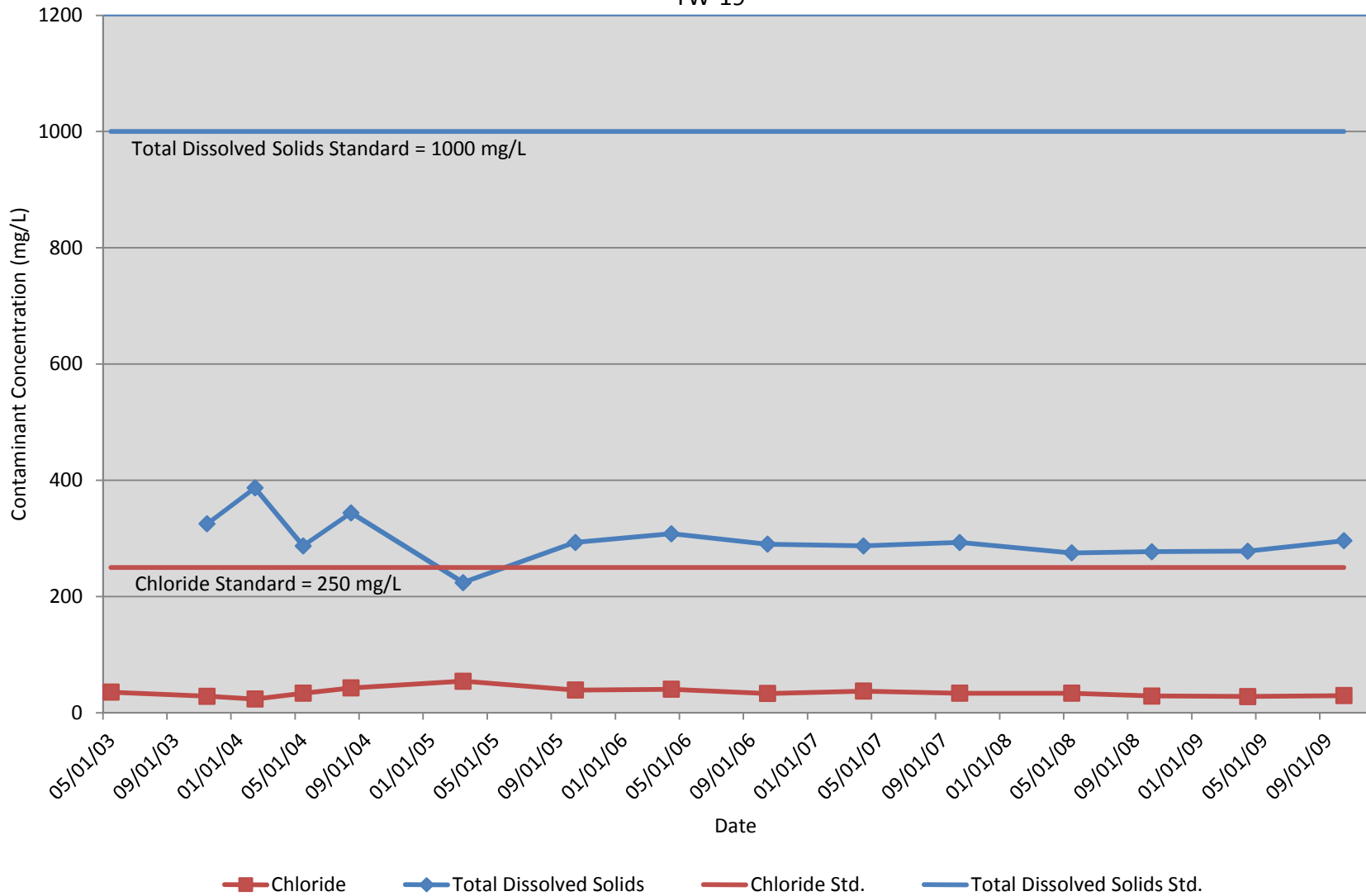
Chevron Environmental Management Company  
 Buckeye Vacuum Field Unit Site  
 Section 1-T18S-R34E, Lea County, NM  
 Dissolved Chloride and Total Dissolved Solids  
 TW-15



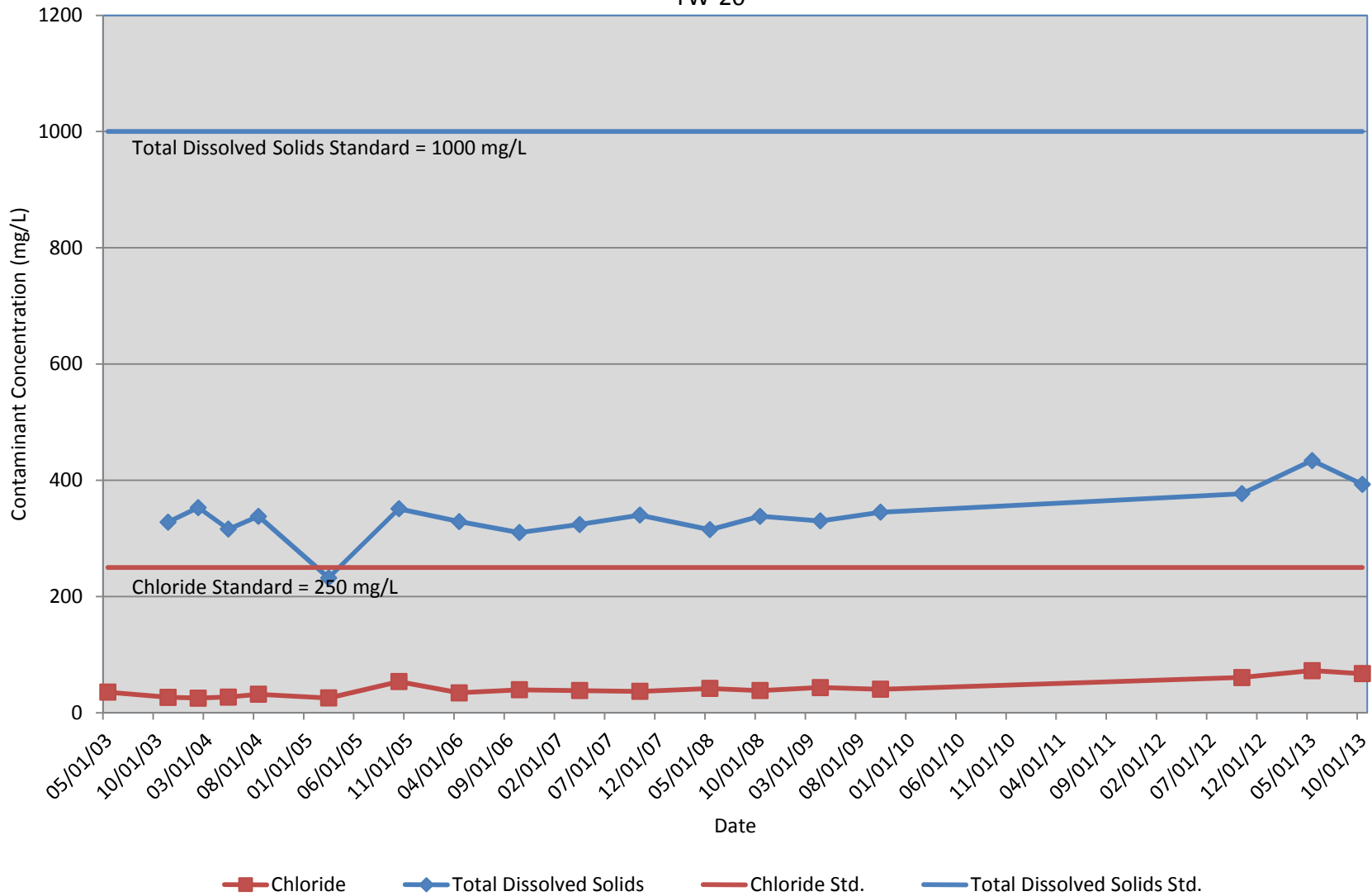
Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-17



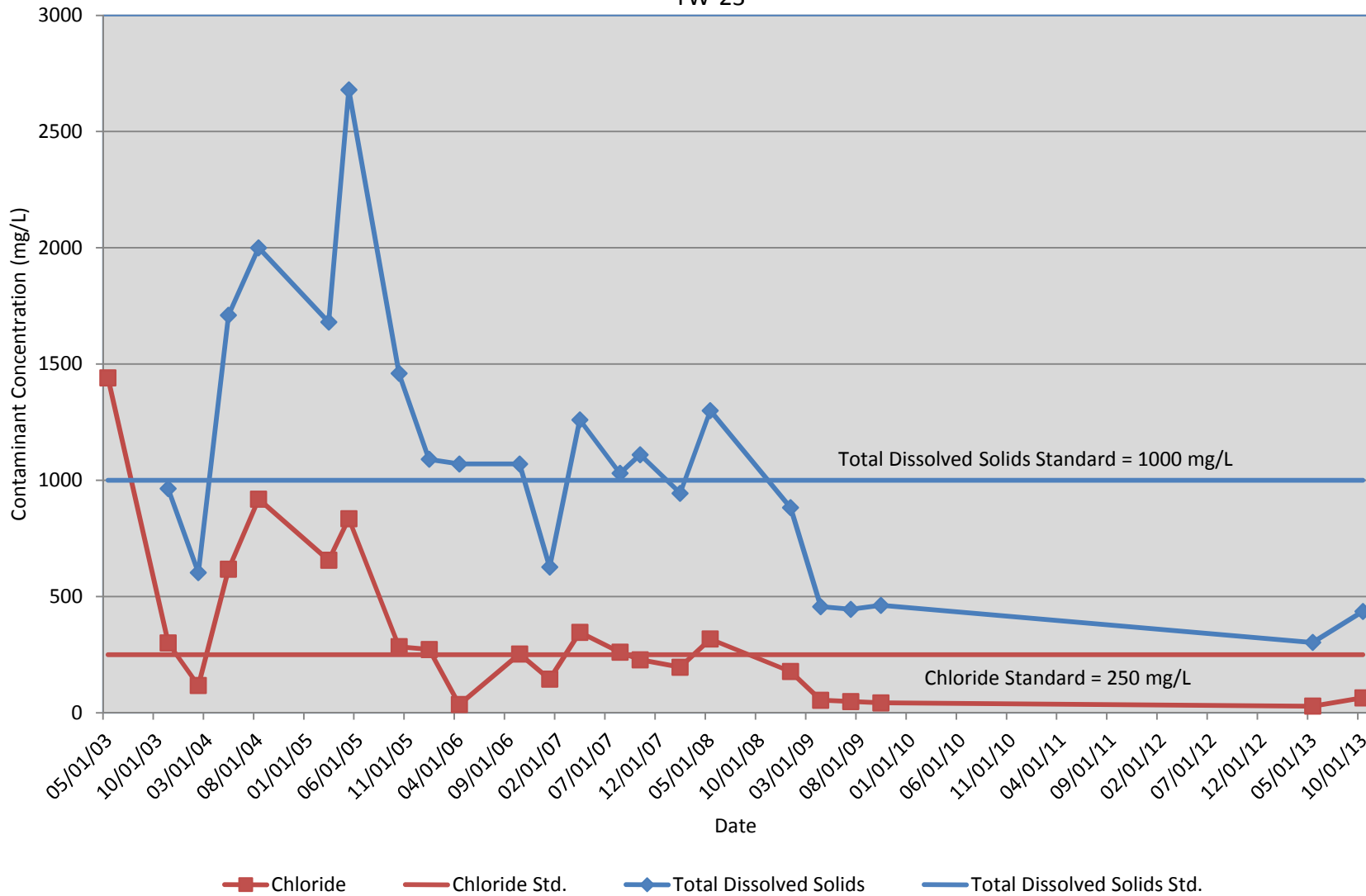
Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-19



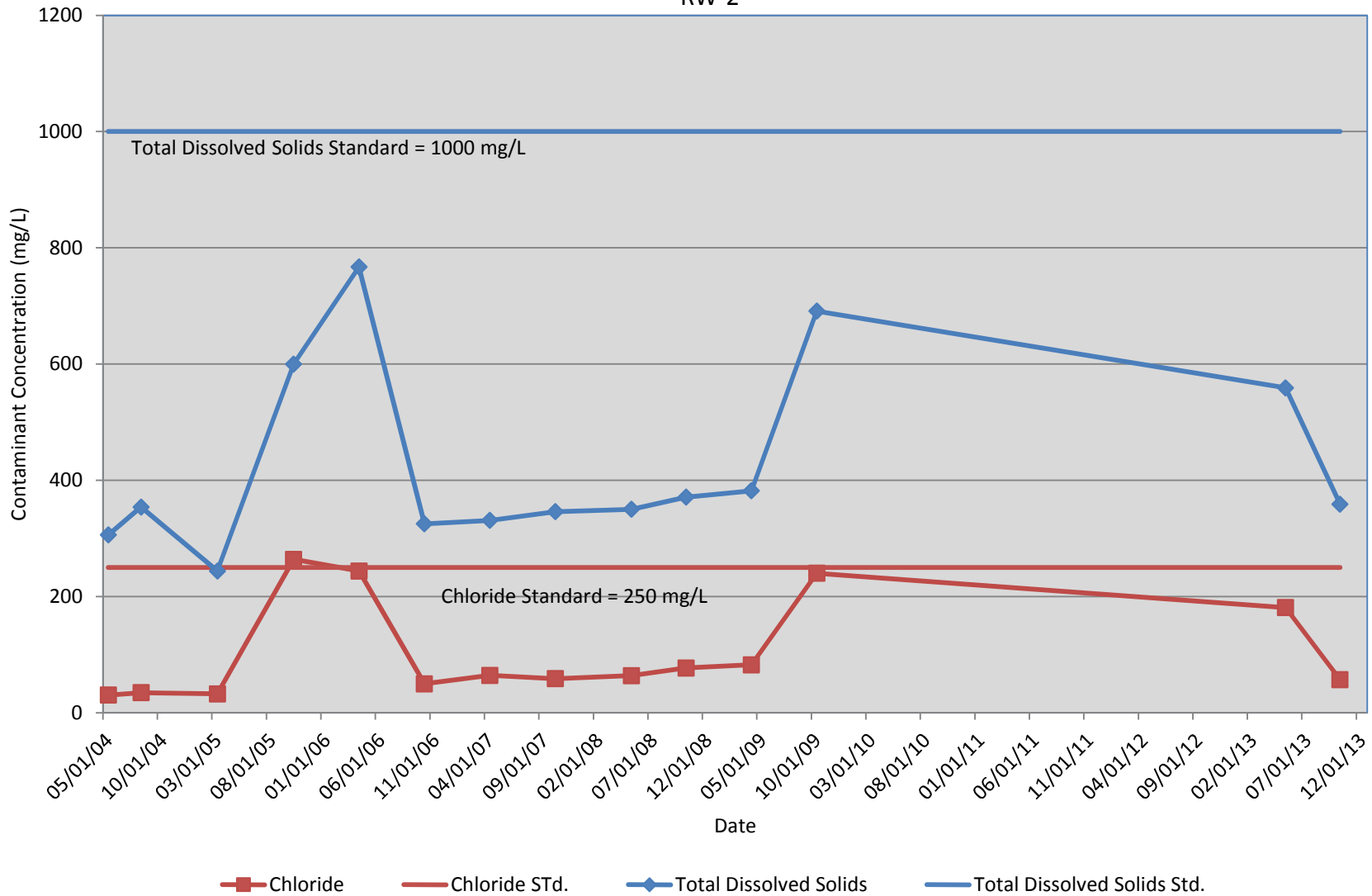
Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-20



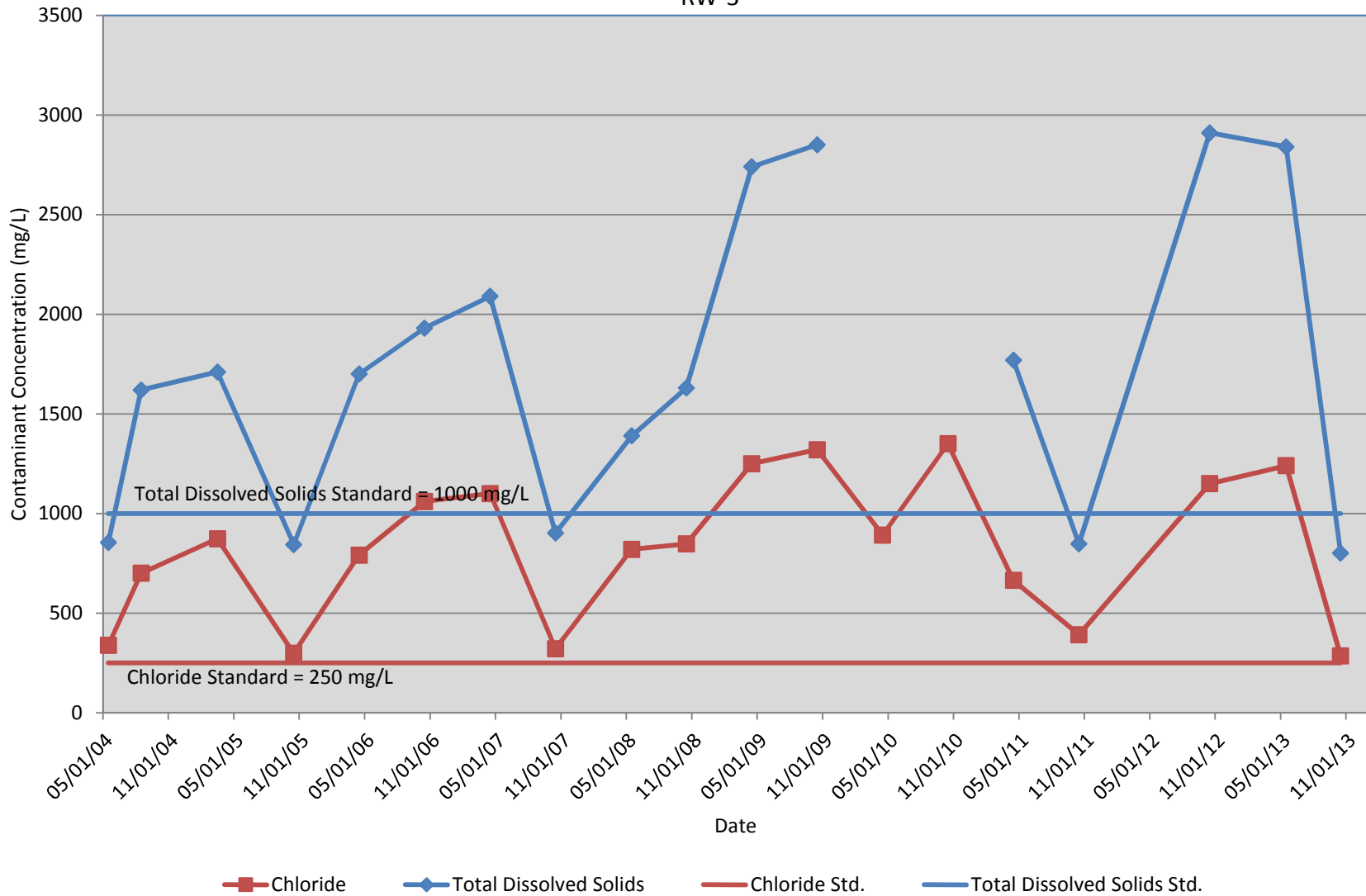
Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
TW-23



Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
RW-2



Chevron Environmental Management Company  
Buckeye Vacuum Field Unit Site  
Section 1-T18S-R34E, Lea County, NM  
Dissolved Chloride and Total Dissolved Solids  
RW-3





## Appendix D

# Analytical Report 463353

for

## Conestoga Rovers & Associates

**Project Manager: John Schnable**

**Buckeye Vacuum**

**073015**

**28-MAY-13**

Collected By: Client



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



28-MAY-13

Project Manager: **John Schnable**  
**Conestoga Rovers & Associates**  
2135 S Loop 250 W  
Midland, TX 79703

Reference: XENCO Report No(s): **463353**  
**Buckeye Vacuum**  
Project Address: Buckeye, NM

**John Schnable:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463353. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463353 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

---

**Kelsey Brooks**

Project Manager

***Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.***

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



## Sample Cross Reference 463353



Conestoga Rovers & Associates, Midland, TX

Buckeye Vacuum

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TW-23-051613	W	05-16-13 09:35		463353-001
TW-14-051613	W	05-16-13 10:30		463353-002
TW-20-051613	W	05-16-13 11:15		463353-003
TW-13-051613	W	05-16-13 12:00		463353-004
TW-9-051613	W	05-16-13 14:40		463353-005
TW-10-051613	W	05-16-13 12:45		463353-006
RW-2-051613	W	05-16-13 13:55		463353-007
RW-3-051613	W	05-16-13 10:00		463353-008
DUP-051613	W	05-16-13 00:00		463353-009

***Client Name: Conestoga Rovers & Associates***

***Project Name: Buckeye Vacuum***

Project ID: 073015

Work Order Number(s): 463353

Report Date: 28-MAY-13

Date Received: 05/17/2013

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**Sample receipt non conformances and comments:**

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**Sample receipt non conformances and comments per sample:**

None

# Certificate of Analysis Summary 463353

Conestoga Rovers & Associates, Midland, TX

Project Name: Buckeye Vacuum



Project Id: 073015

Contact: John Schnable

Project Location: Buckeye, NM

Date Received in Lab: Fri May-17-13 10:30 am

Report Date: 28-MAY-13

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	463353-001	463353-002	463353-003	463353-004	463353-005	463353-006
	<i>Field Id:</i>	TW-23-051613	TW-14-051613	TW-20-051613	TW-13-051613	TW-9-051613	TW-10-051613
	<i>Depth:</i>						
	<i>Matrix:</i>	WATER	WATER	WATER	WATER	WATER	WATER
	<i>Sampled:</i>	May-16-13 09:35	May-16-13 10:30	May-16-13 11:15	May-16-13 12:00	May-16-13 14:40	May-16-13 12:45
<b>Inorganic Anions by EPA 300/300.1</b>	<i>Extracted:</i>	May-21-13 10:00	May-21-13 10:00	May-21-13 10:00	May-21-13 10:00	May-21-13 10:00	May-21-13 10:00
	<i>Analyzed:</i>	May-21-13 17:40	May-21-13 18:01	May-21-13 18:23	May-21-13 18:45	May-21-13 19:06	May-21-13 19:50
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		28.5 2.00	45.2 5.00	72.5 5.00	68.2 5.00	104 5.00	379 10.0
<b>TDS by SM2540C</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	May-22-13 13:00	May-22-13 13:00	May-22-13 13:00	May-22-13 13:00	May-22-13 13:00	May-22-13 13:00
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total dissolved solids		302 5.00	450 5.00	434 5.00	630 5.00	521 5.00	1340 5.00

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.0%



Kelsey Brooks  
Project Manager



# Certificate of Analysis Summary 463353

Conestoga Rovers & Associates, Midland, TX

Project Name: Buckeye Vacuum



Project Id: 073015

Contact: John Schnable

Project Location: Buckeye, NM

Date Received in Lab: Fri May-17-13 10:30 am

Report Date: 28-MAY-13

Project Manager: Kelsey Brooks

<b>Analysis Requested</b>	<b>Lab Id:</b>	463353-007	463353-008	463353-009			
	<b>Field Id:</b>	RW-2-051613	RW-3-051613	DUP-051613			
	<b>Depth:</b>						
	<b>Matrix:</b>	WATER	WATER	WATER			
	<b>Sampled:</b>	May-16-13 13:55	May-16-13 10:00	May-16-13 00:00			
<b>Inorganic Anions by EPA 300/300.1</b>	<b>Extracted:</b>	May-21-13 10:00	May-21-13 10:00	May-21-13 10:00			
	<b>Analyzed:</b>	May-21-13 20:11	May-22-13 15:11	May-22-13 15:33			
	<b>Units/RL:</b>	mg/L RL	mg/L RL	mg/L RL			
Chloride		181 5.00	1240 20.0	1250 20.0			
<b>TDS by SM2540C</b>	<b>Extracted:</b>						
	<b>Analyzed:</b>	May-22-13 13:00	May-22-13 13:00	May-22-13 13:00			
	<b>Units/RL:</b>	mg/L RL	mg/L RL	mg/L RL			
Total dissolved solids		559 5.00	2840 5.00	2130 5.00			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Version: 1.0%

Kelsey Brooks  
Project Manager

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 5332 Blackberry Drive, San Antonio TX 78238  
 2505 North Falkenburg Rd, Tampa, FL 33619  
 12600 West I-20 East, Odessa, TX 79765  
 6017 Financial Drive, Norcross, GA 30071  
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



**Project Name: Buckeye Vacuum**

**Work Order #:** 463353

**Project ID:**

073015

**Lab Batch #:** 914533

**Sample:** 914533-1-BKS

**Matrix:** Water

**Date Analyzed:** 05/22/2013

**Date Prepared:** 05/22/2013

**Analyst:** AMB

**Reporting Units:** mg/L

**Batch #:** 1

## BLANK /BLANK SPIKE RECOVERY STUDY

TDS by SM2540C	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Total dissolved solids	<5.00	1000	915	92	80-120	

Blank Spike Recovery [D] =  $100 * [C] / [B]$

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

**Project Name: Buckeye Vacuum**

**Work Order #: 463353**

**Analyst: AMB**

**Date Prepared: 05/21/2013**

**Project ID: 073015**

**Date Analyzed: 05/21/2013**

**Lab Batch ID: 914571**

**Sample: 638636-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<1.00	25.0	25.4	102	25.0	25.3	101	0	80-120	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## Form 3 - MS Recoveries



Project Name: Buckeye Vacuum

Work Order #: 463353

Lab Batch #: 914571

Date Analyzed: 05/21/2013

QC- Sample ID: 463353-005 S

Reporting Units: mg/L

Project ID: 073015

Analyst: AMB

Date Prepared: 05/21/2013

Batch #: 1

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	104	125	237	106	80-120	

Lab Batch #: 914571

Date Analyzed: 05/21/2013

QC- Sample ID: 463385-001 S

Reporting Units: mg/L

Date Prepared: 05/21/2013

Analyst: AMB

Batch #: 1

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	20.4	50.0	76.6	112	80-120	

Matrix Spike Percent Recovery [D] =  $100 \times (C-A)/B$   
Relative Percent Difference [E] =  $200 \times (C-A)/(C+B)$   
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

**Project Name: Buckeye Vacuum**

**Work Order #:** 463353

**Lab Batch #:** 914533

**Project ID:** 073015

**Date Analyzed:** 05/22/2013 13:00

**Date Prepared:** 05/22/2013

**Analyst:** AMB

**QC- Sample ID:** 463353-007 D

**Batch #:** 1

**Matrix:** Water

**Reporting Units:** mg/L

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total dissolved solids	559	620	10	30	

**Lab Batch #:** 914533

**Date Analyzed:** 05/22/2013 13:00

**Date Prepared:** 05/22/2013

**Analyst:** AMB

**QC- Sample ID:** 463385-001 D

**Batch #:** 1

**Matrix:** Water

**Reporting Units:** mg/L

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total dissolved solids	302	316	5	30	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.  
 BRL - Below Reporting Limit

Company-City <i>CEA / Midland</i>		Phone <i>432-656-0086</i>	
Project Name-Location <i>Buckeye Vacuum Buckeye, NM</i>		Project ID <i>073015</i>	
Proj. State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other <i>NM</i>		Proj. Manager (PM) <i>John Schnable</i>	
E-mail Results to <input type="checkbox"/> PM and <input type="checkbox"/> Inc. Invoice with Final Report <input type="checkbox"/> Invoice must have a P.O.		Fax No: <i>432-656-0156</i>	
Quote/Pricing: P.O. No: <input type="checkbox"/> Call for P.O.			
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP			
QAPP Per-Contract CLP AGCEE NAVY DOE DOD USACE OTHER:			
Special DLS (GW DW QAPP MDLs RLS See Lab PM Included Call PM)			
Sampler Name <i>Joe Morales</i>	Signature <i>[Signature]</i>		
Sample ID	Sampling Date	Time	Depth ft' In" m
1 <i>TW-23-051613</i>	<i>5-16-13</i>	<i>0935</i>	
2 <i>TW-14-051613</i>	<i>5-16-13</i>	<i>1030</i>	
3 <i>TW-20-051613</i>	<i>5-16-13</i>	<i>1115</i>	
4 <i>TW-13-051613</i>	<i>5-16-13</i>	<i>1200</i>	
5 <i>TW-9-051613</i>	<i>5-16-13</i>	<i>1440</i>	
6 <i>TW-10-051613</i>	<i>5-16-13</i>	<i>1245</i>	
7 <i>AW-2-051613</i>	<i>5-16-13</i>	<i>1355</i>	
8 <i>AW-3-051613</i>	<i>5-16-13</i>	<i>1400</i>	
9 <i>AW-051613</i>	<i>5-16-13</i>	<i>—</i>	
10			
Relinquished by (Initials and Sign) <i>JM [Signature]</i>		Date & Time <i>5-17-13 1030</i>	
Relinquished to (Initials and Sign) <i>[Signature]</i>		Date & Time <i>5-17-13 1030</i>	
Total Containers per COC: <i>9</i>		Cooler Temp: <i>1.0°C</i>	
VOA: Full-List BTEX-MTBE EtOH Oxyg VOHS VOAs VOA: PP TCL DW Appdx-1 Appdx-2 CALL Other: PAHs SIM 8310 8270 TX-1005 DRO GRO MA EPH MA VPH SVOCs: Full-List DW BN&AE TCLP PP Appdx-2 CALL OC Pesticides PCBs Herbicides OP Pesticides Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx2 SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs) EDB / DBCP Chlorides EPA 300.0 TDS EPA 160.1			
TATASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Addn: PAH above mg/L W, mg/Kg S Highest Hit Hold Samples (Surcharges will apply and are pre-approved) Sample Clean-ups are pre-approved as needed			
Remarks			
Addn:	Date	Rcv. by:	From:

Preservatives: Various (V), HCl pH-2 (H), H2SO4 pH-2 (S), Aspb Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4C) (C), None (NA), See Label (L), Other (O)  
 Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other \_\_\_\_\_  
 Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)  
 Matrix: Air (A), Product (P), Solid (S), Water (W), Liquid (L)  
 Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.  
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# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



**Client:** Conestoga Rovers & Associates

**Date/ Time Received:** 05/17/2013 10:30:00 AM

**Work Order #:** 463353

**Acceptable Temperature Range:** 0 - 6 degC

**Air and Metal samples Acceptable Range:** Ambient

**Temperature Measuring device used :**

### Sample Receipt Checklist

### Comments

#1 *Temperature of cooler(s)?	1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:
----------	-----------------

**Checklist completed by:**

*Kelsey Brooks*  
Kelsey Brooks

Date: 05/17/2013

**Checklist reviewed by:**

*Kelsey Brooks*  
Kelsey Brooks

Date: 05/17/2013



# Analytical Report 472900

for

## Conestoga Rovers & Associates

**Project Manager: Chris Knight**

**Buckeye Vacuum**

**073015**

**04-NOV-13**

Collected By: Client



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-13-15-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



04-NOV-13

Project Manager: **Chris Knight**  
**Conestoga Rovers & Associates**  
2135 S Loop 250 W  
Midland, TX 79703

Reference: XENCO Report No(s): **472900**  
**Buckeye Vacuum**  
Project Address: TX

**Chris Knight:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 472900. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 472900 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

---

**Kelsey Brooks**

Project Manager

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## Sample Cross Reference 472900



Conestoga Rovers & Associates, Midland, TX

Buckeye Vacuum

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TW23-102413	W	10-24-13 17:55		472900-001
TW14-102513	W	10-25-13 08:15		472900-002
TW20-102513	W	10-25-13 09:25		472900-003
TW13-102513	W	10-25-13 12:15		472900-004
TW9-102513	W	10-25-13 13:20		472900-005
RW2-102513	W	10-25-13 14:25		472900-006
TW10-102513	W	10-25-13 15:15		472900-007
RW3-102513	W	10-25-13 15:45		472900-008
Dup1-102513	W	10-25-13 00:00		472900-009



## CASE NARRATIVE



*Client Name: Conestoga Rovers & Associates*

*Project Name: Buckeye Vacuum*

Project ID: 073015  
Work Order Number(s): 472900

Report Date: 04-NOV-13  
Date Received: 10/28/2013

---

**Sample receipt non conformances and comments:**

---

**Sample receipt non conformances and comments per sample:**

None

# Certificate of Analysis Summary 472900

Conestoga Rovers & Associates, Midland, TX

Project Name: Buckeye Vacuum



Project Id: 073015

Contact: Chris Knight

Project Location: TX

Date Received in Lab: Mon Oct-28-13 12:09 pm

Report Date: 04-NOV-13

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	472900-001	472900-002	472900-003	472900-004	472900-005	472900-006
	<i>Field Id:</i>	TW23-102413	TW14-102513	TW20-102513	TW13-102513	TW9-102513	RW2-102513
	<i>Depth:</i>						
	<i>Matrix:</i>	WATER	WATER	WATER	WATER	WATER	WATER
	<i>Sampled:</i>	Oct-24-13 17:55	Oct-25-13 08:15	Oct-25-13 09:25	Oct-25-13 12:15	Oct-25-13 13:20	Oct-25-13 14:25
<b>Inorganic Anions by EPA 300/300.1</b>	<i>Extracted:</i>	Oct-31-13 10:00	Oct-31-13 10:00	Oct-31-13 10:00	Oct-31-13 10:00	Oct-31-13 10:00	Oct-31-13 10:00
	<i>Analyzed:</i>	Nov-01-13 05:48	Nov-01-13 06:34	Nov-01-13 06:56	Nov-01-13 07:19	Nov-01-13 07:42	Nov-01-13 08:50
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		64.0 5.00	73.4 5.00	67.3 5.00	51.0 5.00	90.3 5.00	57.0 5.00
<b>TDS by SM2540C</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Oct-31-13 12:00	Oct-31-13 12:00	Oct-31-13 12:00	Oct-31-13 12:00	Oct-31-13 12:00	Oct-31-13 12:00
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total dissolved solids		436 5.00	296 5.00	393 5.00	688 5.00	434 5.00	359 5.00

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Kelsey Brooks  
Project Manager



# Certificate of Analysis Summary 472900

Conestoga Rovers & Associates, Midland, TX

Project Name: Buckeye Vacuum



Project Id: 073015

Contact: Chris Knight

Project Location: TX

Date Received in Lab: Mon Oct-28-13 12:09 pm

Report Date: 04-NOV-13

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	472900-007 TW10-102513  WATER Oct-25-13 15:15	472900-008 RW3-102513  WATER Oct-25-13 15:45	472900-009 Dup1-102513  WATER Oct-25-13 00:00			
<b>Inorganic Anions by EPA 300/300.1</b>	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	Oct-31-13 10:00 Nov-01-13 09:13 mg/L RL	Oct-31-13 10:00 Nov-01-13 09:35 mg/L RL	Oct-31-13 10:00 Nov-01-13 09:58 mg/L RL			
Chloride		261 10.0	285 10.0	287 10.0			
<b>TDS by SM2540C</b>	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	Oct-31-13 12:00 mg/L RL	Oct-31-13 12:00 mg/L RL	Oct-31-13 12:00 mg/L RL			
Total dissolved solids		1100 5.00	801 5.00	810 5.00			

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Kelsey Brooks  
Project Manager

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 6017 Financial Drive, Norcross, GA 30071  
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(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



# Blank Spike Recovery

Project Name: Buckeye Vacuum



Work Order #: 472900

Project ID:

073015

Lab Batch #: 926602

Sample: 926602-1-BKS

Matrix: Water

Date Analyzed: 10/31/2013

Date Prepared: 10/31/2013

Analyst: AMB

Reporting Units: mg/L

Batch #: 1

## BLANK /BLANK SPIKE RECOVERY STUDY

TDS by SM2540C  Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total dissolved solids	<5.00	1000	978	98	80-120	

Blank Spike Recovery [D] =  $100 * [C] / [B]$

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



# BS / BSD Recoveries



Project Name: Buckeye Vacuum

Work Order #: 472900

Project ID: 073015

Analyst: AMB

Date Prepared: 10/31/2013

Date Analyzed: 11/01/2013

Lab Batch ID: 926579

Sample: 646301-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<1.00	25.0	24.3	97	25.0	24.1	96	1	80-120	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries

Project Name: Buckeye Vacuum



Work Order #: 472900

Lab Batch #: 926579

Date Analyzed: 11/01/2013

QC- Sample ID: 472900-001 S

Reporting Units: mg/L

Date Prepared: 10/31/2013

Batch #: 1

Project ID: 073015

Analyst: AMB

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	64.0	125	196	106	80-120	

Lab Batch #: 926579

Date Analyzed: 11/01/2013

QC- Sample ID: 473098-001 S

Reporting Units: mg/L

Date Prepared: 10/31/2013

Batch #: 1

Analyst: AMB

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	206	500	726	104	80-120	

Matrix Spike Percent Recovery [D] =  $100 \times (C-A)/B$   
Relative Percent Difference [E] =  $200 \times (C-A)/(C+B)$   
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



**Project Name: Buckeye Vacuum**

**Work Order #: 472900**

**Lab Batch #: 926602**

**Project ID: 073015**

**Date Analyzed: 10/31/2013 12:00**

**Date Prepared: 10/31/2013**

**Analyst: AMB**

**QC- Sample ID: 472900-005 D**

**Batch #: 1**

**Matrix: Water**

**Reporting Units: mg/L**

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total dissolved solids	434	480	10	10	

**Lab Batch #: 926602**

**Date Analyzed: 10/31/2013 12:00**

**Date Prepared: 10/31/2013**

**Analyst: AMB**

**QC- Sample ID: 473098-001 D**

**Batch #: 1**

**Matrix: Water**

**Reporting Units: mg/L**

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total dissolved solids	1960	2060	5	10	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$

All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



- ☐ 4143 Greenbriar Drive, Stafford, Tx 77477 281-240-4200  
☐ 5332 Blackberry Drive, San Antonio, Tx 78238 210-509-3334  
☐ 9701 Harry Hines Blvd., Dallas, Tx 75220 214-902-0300

# ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

- ☒ 12600 West I-20 East, Odessa, Tx 79765 432-569-1800  
☐ 842 Cantwell, Corpus Christi, Tx 78408 361-884-0371

Serial #: 239917 Page 1 of 1

Company-City  
CRA

Phone  
432-686-0086

Proj Name-Location

☐ Previously done at XENCO

Project ID  
073915

Project State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other

Proj. Manager (PM)  
John Schmale

e-Mail Results to ☐ PM and

Fax No:

Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O. Bill to:

Quote/Pricing:

P.O. No:

☐ Call for P.O.

Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP

QAPP Per-Contract CLP AFCEE NAVY DOE DOD USACE OTHER:

Special DLs (GW DW QAPP MDLs RLS See Lab PM Included Call PM)

Sample Name	Signature	Depth in"	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
TW23-102413	Justin Nixon	1755	W	X	X	2			
TW14-102513		815							
TW20-102513		925							
TW13-102513		1215							
TW9-102513		1320							
RW2-102513		1425							
TW10-102513		1515							
RW3-102513		1545							
Dpl-102513		-							

Relinquished by (Initials and Sign) Date & Time

Relinquished to (Initials and Sign) Date & Time

Date & Time

Total Containers per COC:

Cooler Temp: -1 + 10°C

Upon signings this COC you accept XENCO terms and Conditions unless otherwise agreed on writing. Reports are the Intellectual Property of XENCO until paid. Samples will be held 30 days after final report is e-mailed unless hereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool,<4C) (C), None (NA), See Label (L), Other (O)

Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other

Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid(S), Water (W), Liquid (L)

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Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates,

subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.



# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



**Client:** Conestoga Rovers & Associates

**Date/ Time Received:** 10/28/2013 12:09:00 PM

**Work Order #:** 472900

**Acceptable Temperature Range:** 0 - 6 degC

**Air and Metal samples Acceptable Range:** Ambient

**Temperature Measuring device used :**

### Sample Receipt Checklist

### Comments

#1 *Temperature of cooler(s)?	0
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:
----------	-----------------

**Checklist completed by:**

*Candace James*

Candace James

Date: 10/28/2013

**Checklist reviewed by:**

*Kelsey Brooks*

Kelsey Brooks

Date: 10/28/2013



Xenco Laboratories  
10650 Culebra Rd., Suite 104-154  
San Antonio, TX 78251-4949  
Ph: (210) 509-3334 Fax (210) 509-3335  
Houston - Dallas - San Antonio - Odessa  
Tampa - Atlanta - Phoenix

\* 305 / 41 \*

Invoice No. 305741

Client Information	Invoice Information
<b>Invoice to:</b> Conestoga-Rovers & Associates <b>Contact:</b> Chris Knight <b>Address:</b> 13091 Pond Springs Road Suite A100 Austin, TX 78729 <b>Project Name</b> Buckeye Vacuum <b>Project #:</b> 073015 <b>Requested by:</b> Conestoga Rovers & Associates <b>Contact:</b> Chris Knight	<b>Invoice Date</b> 11.04.13 <b>Due Date:</b> 12.04.13 <b>Terms:</b> 30 Days <b>PO #:</b> 4058676 <b>Lab PM:</b> Kelsey Brooks

Comments:

Products / Services	WO Number	Matrix	TAT	Qty	Price	Ext. Price
Inorganic Anions by EPA 300/300.1	472900	Water	5 Day TAT	9	12.00	\$108.00
TDS by SM2540C	472900	Water	5 Day TAT	9	12.00	\$108.00

**Total: \$216.00**

Please detach this portion and return with your payment

Client Information	Invoice Information: 305741
<b>Client:</b> Conestoga-Rovers & Associates <b>Contact:</b> Chris Knight <b>Terms:</b> 30 Days <b>PO #:</b> 4058676	<b>Work Order Num</b> 472900 <b>Due Date:</b> 12.04.13 <b>Invoice Amount:</b> \$216.00 <b>Amount Remitted</b> <input type="text"/>

Past Due Invoices are subject to a 1.5% per Month service charge, plus collection fees.

Please send your payments to: Xenco Laboratories  
10650 Culebra Rd., Suite 104-154,  
San Antonio, Texas 78251-4949  
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\* 305 / 41 \*

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Comments:

Products / Services	WO Number	Matrix	TAT	Qty	Price	Ext. Price
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TDS by SM2540C	472900	Water	5 Day TAT	9	12.00	\$108.00

**Total: \$216.00**

<b>Austin Office</b>
<b>Approval of Invoice</b>
<b>Project #</b> 073015
<b>Date</b> 11/4/13
<b>Approval</b> CK
<b>G/L Coding</b>
<b>P O #</b> 4058676
<b>Org Code</b>

Please detach this portion and return with your payment

Client Information	Invoice Information: 305741
<b>Client:</b> Conestoga-Rovers & Associates <b>Contact:</b> Chris Knight <b>Terms:</b> 30 Days <b>PO #:</b> 4058676	<b>Work Order Num</b> 472900 <b>Due Date:</b> 12.04.13 <b>Invoice Amount:</b> \$216.00 <b>Amount Remitted</b> <input type="text"/>

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☐ 5332 Blackberry Drive, San Antonio, TX 78238 210-509-3334  
☐ 9701 Harry Hines Blvd., Dallas, TX 75220 214-902-0300

# ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

12600 West I-20 East, Odessa, TX 79765 432-564-1800  
842 Cantwell, Corpus Christi, TX 78408 361-884-0371

Serial #: 239917 Page 1 of 1

Company-City <b>CRA</b>		Phone <b>432-686-0086</b>		Lab Only: <b>472900</b>							
Proj Name-Location <b>Buckeye Vacuum</b>		Previously done at XENCO		TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific. It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.							
Proj State: TX, AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other		Proj. Manager (PM) <b>John Schmale</b>		Remarks							
e-Mail Results to <input type="checkbox"/> PM and		Fax No:		Sample Clean-ups are pre-approved as needed							
Invoice to <input type="checkbox"/> Accounting <input type="checkbox"/> Inc. Invoice with Final Report <input type="checkbox"/> Invoice must have a P.O. Bill to:		P.O. No:		Hold Samples (Surcharges will apply and are pre-approved)							
Quote/Pricing:		P.O. No:		Addn: PAH above mg/L W, mg/kg S Highest Hit							
Reg Program: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP		QAPP Per-Contract CLP AFCEE NAVY DOE DOD USACE OTHER:		TAT ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d							
Special DLs (GW DW QAPP MDLs Rls See Lab PM Included Call PM)		Signature <b>Justin Nixon</b>		Sample Clean-ups are pre-approved as needed							
Sample ID	Sampling Date	Time	Depth ft	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	
1 TW23-102413	10-24-13	1735		W	X	2					
2 TW14-1025-13	10-25-13	815									
3 TW20-102513		925									
4 TW13-102513		1215									
5 TW9-102513		1320									
6 TW2-102513		1425									
7 TW10-102513		1515									
8 TW3-102513		1545									
9 Dupl-102513		-									
Relinquished by: (Initials and Sign) <b>JS Nixon</b>		Date & Time <b>10-28-13 12:00</b>		Relinquished to: (Initials and Sign) <b>Justin Nixon</b>		Date & Time <b>10-28-13 12:09</b>		Total Containers per COC: <b>18</b>		Cooler Temp: <b>-11.0°C</b>	
Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool, <4°C) (C), None (NA), See Label (L), Other (O) Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), TediBag (B), Various (V), Other											
Matrix: Air (A), Product (P), Solid(S), Water (W), Liquid (L)											

Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

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# CRA Simplified Scope of Work (SSOW)/Laboratory Services Purchase Order

## Project Summary:

Project Name: Buckeye Vacuum Field Unit Site  
 CRA Project No./Phase/Task: 073015-2013-01  
 Project Location: Buckeye, NM  
 Client Name: CEMC  
 QAPP Title:

## Database Summary:

Database Maintained: ☐ Yes ☒ No  
 Database Contact:  
 Database Facility Code:

SSOW Ref. Code  
 073015-2013-01-002

FOR INTERNAL USE ONLY - CODING

Note: Is there more than one laboratory  
 for this event? ( SSOW \_ of \_ ) ☐ Yes ☒ No

## Event Summary:

Phase/Study Title: Semi-annual Groundwater Monitoring  
 Event Description: Two semi-annual gauging and sampling events

Rush TAT: ☒ NA  
 Final Report & EDD TAT: Sample Batching:  
 Date Bottles Required: 8 sets (including 1 set for field duplicate) for EPPA300.0 and SM2540  
 Bottle Shipping Address: Conestoga-rovers & Assoc., Inc., 2135 S Loop 250 West  
 Midland, TX 79703

Phone Number: 432-686-0086

Attention: John Schnable

Sampling Frequency: semi-annually

## Contacts:

	Name	Address	Phone	Cell	Email
<b>Client Project Manager:</b>	Luke Welch	1400 Smith Street, Room 07069B, Houston, TX 77002	(713) 372-0292	(832) 627-9171	lukewelch@chevron.com
<b>Consulting Firm:</b>	Conestoga-Rovers & Assoc., Inc.	2135 S Loop 250 West, Midland, TX	432-686-0086		
<b>Project Manager:</b>	John Schnable	2135 S Loop 250 West, Midland, TX	432-686-0086	432-940-2184	jschnable@crawworld.com
<b>Field Leader:</b>	John Schnable	2135 S Loop 250 West, Midland, TX	432-686-0086	432-940-2184	jschnable@crawworld.com
<b>Laboratory (Vendor):</b>	Xenco Laboratories, Inc.	12600 W. I-20 East, Odessa, TX 79765	(432) 563-1800		kelsey.brooks@xenco.com
<b>Lab Project Manager:</b>	Kelsey Brooks				
<b>Chemistry/Data Mgt. Firm:</b>					
<b>Chemist :</b>	Chris G. Knight	13091 Pond Springs Road, Suite A100, Austin, TX 78729	(512) 506-8803		cknight@crawworld.com
<b>Data Manager:</b>	Lidstone, Julie	651 Colby Drive, Waterloo, Ontario N2V 1C2	519-884-0510		jlidstone@crawworld.com

## Lab Deliverables

EDD Format

Hardcopy Level Requested

CRA Data Review Level

## Lab Deliverables Distribution

Rush TAT Data (email deliverable only) :

Final EDD & Result Summary ( PDF ) :

Final Lab Report ☒ PDF ☐ CD ☐ Hard Copy :

## Additional Reporting Requirements

Form 1's include: ☐ MDLS ☒ PQLs ☐ 1 Values  
 TICs: ☐ Yes ☐ No  
 Soil Reporting: ☐ Dry ☐ Wet  
 Database Exports - ☐ Yes ☐ No  
 Reporting down to MDL

## Data Management Deliverables

☒ EQUIS Database ☐ Cross Tab Table ☐ Flat File ☐ Databox ☐ Other (please specify):

## Data Management Deliverables Distribution

Data Management DV TAT:

## Comments

This purchase order is for two semi-annual events. Eight pairs of samples plus a trip blank will be submitted for each event.

\*\*\* additional Final Lab Report copy (in \*.pdf format) is available on CRA's MyPortal Site in the Project File folder or on Program specific SharePoint site; please contact project Chemist

SSOW Email Distribution List: lukewelch@chevron.com; jschnable@crawworld.com; kelsey.brooks@xenco.com; cknight@crawworld.com; jlidstone@crawworld.com

Prepared By:	Date:	Revision No.:	Revision Date:
Chris G. Knight	5/15/2013		

# CRA Simplified Scope of Work (SSOW)/Laboratory Services Purchase Order

SSOW Ref. Code  
073015-2013-01-002

Project Name: Buckeye Vacuum Field Unit Site

Phase/Study Title: Semi-annual Groundwater Monitoring

CRA Project No./Phase/Task: 073015-2013-01

Event Description: Two semi-annual gauging and sampling events

Project Location: Buckeye, NM

Item	Sample Matrix	Analytical Parameters	Analytical Methods	Holding Time	Unit Prices	Applicable Surcharge Multiplier <sup>(1)</sup>	Extended Prices	Estimated Sample Qty/Event	Field QC Samples					Total Sample Qty.	Billable Samples	Estimated Cost/Event
									MSD	Lab Dup	Tip Bk	Rbk	Field Dup			
1st Event	WG	Chlorides Total Dissolved Solids	EPA300.0 SM2540	28 days 7 days	\$ 12.00 \$ 12.00	1.00 1.00	\$ 12.00 \$ 12.00	7 7			1		1	9	9	\$108.00 \$96.00
2nd Event	WG	Chlorides Total Dissolved Solids	EPA300.0 SM2540	28 days 7 days	\$ 12.00 \$ 12.00	1.00 1.00	\$ 12.00 \$ 12.00	7 7			1		1	9	9	\$108.00 \$96.00

<sup>(1)</sup> Explanation of Surcharges:

Estimated Event Subtotal: \$408.00  
Laboratory Surcharge(s): \$0.00  
Estimated Event Total Costs: \$408.00

## Lab Contracting Summary:

### Governing Terms and Conditions

- ☐ Master Agreement Number: \_\_\_\_\_  
☒ Exhibit "A" Terms and Conditions  
☐ Client Contract

CRA Purchase Order Number: 4058676

Name of Client:

Other Additional Insureds:

Governing Law:

Currency:

Address Invoice to:

Chris G. Knight c/o CRA  
13091 Pond Springs Road, Suite A100  
Austin, TX 78729

Chris G. Knight  
(authorized CRA signature)

5/15/2013  
(date signed)

Kelsey E Brooks  
(authorized Vendor signature)

5/15/2013  
(date signed)

*Typed name constitutes authorized signature.*

Vendor to provide and deliver all items or services set out or otherwise described below subject to the governing terms and conditions checked above. This Purchase Order expressly limits acceptance to such terms and conditions. Any additional or different terms proposed by Vendor are rejected unless expressly agreed to in writing by CRA. To accept this Purchase Order, Vendor must sign, date, and return one copy of this page to issuer before starting any work. CRA's receipt of Signature of this Purchase Order may be sent by facsimile (with confirmation by transmitting machine) and/or transmitted by portable document file (PDF) which shall be treated as an original signature, and any such signature, facsimile, PDF file, or copy of this signed Purchase Order shall be valid as an original and shall be binding as if it were the original. Show Purchase Order No. on all correspondence, invoices, and delivery papers.



CRA Simplified Scope of Work (SSOW)/Laboratory Services Purchase Order

SSOW Ref. Code  
073015-2013-01-002

Project Name:	Buckeye Vacuum Field Unit Site	Phase/Study Title:	Semi-annual Groundwater Monitoring
CRA Project No./Phase/Task:	073015-2013-01	Event Description:	Two semi-annual gauging and sampling events
Project Location:	Buckeye, NM		
Parameter	Analytes	Targeted Reporting Limits	Action Limits (if applicable)
			Units

Chlorides	Standard
Total Dissolved Solids	Standard

# EXHIBIT A

## TERMS AND CONDITIONS - LABORATORY (CRA)

1. **DEFINITIONS:** "Order" shall mean the Purchase Order to which these Terms and Conditions are attached, these Terms and Conditions, and any other Exhibits listed in the Order as if they were a part of one and the same document; "Services" shall mean the work to be performed for CRA by VENDOR under this Order; "Laws" shall mean any and all applicable statutes, laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction; "Site" shall mean the lands, structures, facilities, or other areas made available to VENDOR for the performance of the Services, storage, or access; "CLIENT" shall mean the individual or entity named in the Order with whom CRA has entered into an agreement; "CRA" shall mean the party issuing the Order.
2. **INSURANCE:** VENDOR shall purchase and maintain throughout the performance of the Services at least the following insurance and limits of liability: (i) Workers' Compensation - Statutory; (ii) Employers' Liability - \$1,000,000 each category (US projects only); (iii) Commercial General Liability, including broad form property damage liability, (contingent employers' liability - CDN projects only), contractor's protective liability, contractual liability, and completed operations liability - \$1,000,000 per occurrence/\$2,000,000 aggregate; and (iv) Professional Liability, including environmental coverage - \$1,000,000 per claim/\$2,000,000 aggregate. Policies under (iii) and (iv) above shall cover CRA, CLIENT, and each other person or entity listed on the face of the Order as additional insureds. Before any work is started, VENDOR shall deliver certificates of insurance to CRA, as certificate holder, evidencing required insurance in force and that the insurance company issuing each policy will not cancel each such policy except after 30 days (10 days for non-payment of premium) written notice by mail to CRA of its intention to do so. Certificates must be marked to show the Purchase Order number.
3. **INDEMNIFICATION:** VENDOR, to the fullest extent permitted by law, shall indemnify and hold harmless CRA, CLIENT, each other person or entity listed on the face of the Order, and their directors, officers, partners, officials, employees, and agents, from and against any and all claims, costs, losses, and damages (including reasonable attorneys' fees and cost of defense) arising out of or resulting from VENDOR's negligent acts, errors, or omissions in the performance of the Services under this Order and those of its subcontractors or anyone for whose acts VENDOR may be liable.
4. **WARRANTY:** VENDOR warrants to CRA that all Services will be in accordance with this Order, and such Services shall be performed in the manner consistent with the level of skill and diligence ordinarily exercised by members of VENDOR's profession practicing under similar conditions at the same time and in the same locality. VENDOR shall correct, replace, and/or reperform any Services not meeting this standard, at its expense and without additional compensation, promptly after notice by CRA.
5. **RELATIONSHIP OF PARTIES:** VENDOR shall be an independent contractor and shall have complete and sole responsibility for and control over its employees, agents, representatives, and subcontractors, and the means and methods of providing the Services.
6. **ASSIGNMENT AND SUBCONTRACTING:** VENDOR shall not assign or sublet this Order or any part thereof and shall not assign any money due or to become due hereunder without first obtaining the written consent of CRA.
7. **LAWS:** In the performance of the Services, VENDOR shall comply with Laws and shall pay all costs connected with such compliance. VENDOR shall obtain and pay for all permits, certificates, and licenses necessary for the performance of the Services.
8. **TAXES:** VENDOR shall pay all fees or taxes, including sales, use, consumer, all taxes for employment insurance, pensions, or any similar purpose, and other taxes mandated by Laws. No liability shall accrue to CRA for any such taxes.
9. **HEALTH AND SAFETY:** Samples delivered by CRA to VENDOR or picked up by VENDOR for analysis may contain varying concentrations of potentially toxic or hazardous substances. VENDOR shall be solely responsible for health and safety of its employees, for compliance with Laws and practices required by the applicable health and safety legislation, for safety of persons and property, and for initiating, maintaining, and supervising all health and safety precautions and programs in connection with the Services.
10. **SAMPLES:** VENDOR shall accept samples upon delivery or pickup by notation on chain-of-custody documents or otherwise in writing. VENDOR shall be solely responsible for loss of or damage to such samples after samples are received or picked up. VENDOR shall retain samples until written authorization is received from CRA to dispose of such samples or for a period of 60 days following date of submission of the written final analytical report for such samples, whichever is earlier. VENDOR shall arrange and pay for the lawful removal and disposal of samples.
11. **DATA VALIDITY:** If work completed by VENDOR is deficient, due to reasons such as samples analyzed outside of specified quality control criteria established by the analytical method(s) (and/or project-specific QAPP), and if CRA reports such deficiency in writing promptly after CRA's discovery thereof, VENDOR shall promptly correct such deficient Services after receipt of such report at no additional cost to CRA. If VENDOR fails to promptly correct such deficient Services after receiving written notification from CRA, CRA may cause the deficient Services to be corrected and deduct costs incurred from VENDOR's compensation. Failure of VENDOR to produce valid data for any sample(s), for reasons other than those confirmed to be attributable to demonstrated sample matrix interferences and/or improper sampling technique and/or inappropriate sample handling, storage, and transfer prior to receipt by VENDOR and/or high concentrations of interfering target or non-target compounds for the sample analyzed, shall be cause for CRA to require VENDOR to compensate CRA for any resampling and/or reanalysis of such sample(s) to replace the invalid data.
12. **AUDIT AND RECORD RETENTION:** VENDOR shall maintain fiscal records in accordance with generally accepted accounting practices and principles to substantiate all invoiced amounts. VENDOR shall maintain all records (fiscal and other) on file in legible form. CRA and/or CLIENT shall have the right to audit, copy, and inspect said records during VENDOR's normal business hours and for a period of 3 years after final completion of the Services. VENDOR shall retain analytical data for 3 years following transmittal of the final analytical report for such data. CRA and/or CLIENT shall have the right to inspect VENDOR's facility and audit and/or copy said data during VENDOR's normal business hours at any time with reasonable notice.
13. **CONFIDENTIALITY:** VENDOR shall maintain as confidential (and shall cause its employees, agents, and subcontractors to maintain as confidential) and shall not disclose to others, including without limitation, any governmental authority, either before or after termination or completion of this Order, any data, documents, reports, or other information ("information") provided to VENDOR by CRA or any employees, agents, or consultants of CRA or any information obtained or generated by VENDOR pursuant to this Order, except (i) as to information which has come into the public domain other than through VENDOR or any of its employees, subcontractors, or agents; or (ii) as expressly authorized in writing in advance by CRA. VENDOR's obligation to maintain confidentiality shall not apply to disclosures compelled by law, an order of a court of competent jurisdiction, or a subpoena; provided, however, VENDOR shall immediately notify CRA of the circumstances requiring such disclosure and shall refrain from such disclosure for the maximum period of time allowed by law so that CRA may procure a protective order or take other action to protect the confidentiality of the information. VENDOR shall make all of its employees, agents, and subcontractors having access to said information aware of this obligation of confidentiality and bind each of them under terms identical to these obligations of confidence as they apply in connection with their respective portion of the Services. No articles, papers, or treaties related to or in any way associated with the Services shall be submitted for publication without CRA's express prior written consent.
14. **PAYMENT:** VENDOR shall submit invoices for Services rendered in a form and with documentation as CRA may require (including evidence of workers' compensation payments - CDN projects only). Payment on invoices approved by CRA, including final payment, will be made within 14 days after CRA receives payment from CLIENT on account thereof, or 180 days after CRA's receipt of an acceptable invoice, whichever is sooner. Invoice for final payment will not be approved until VENDOR has completed all work, submitted all deliverables, and provided that VENDOR when and if required shall then have furnished to CRA satisfactory evidence of payment of all obligations arising out of this Order. No payment made by CRA, hereunder, including final payment, shall be construed as evidence of the proper performance of the Services; nor of acceptance of defective or nonconforming Services. Acceptance of final payment by VENDOR shall constitute a waiver of all claims by VENDOR against CRA and CLIENT.
15. **LIENS:** VENDOR shall indemnify and hold harmless CRA and CLIENT (and the owner of the Site) from and against any liability, claim, demand, damage, cost, and expense relating to any claim or lien for labor or materials furnished in connection with the Services.
16. **CHANGES:** CRA shall have the right at any time to make changes, revisions, additions, deletions ("changes") in the Services and the provisions of this Order shall apply to all such changes. Any changes to this Order shall be made in accordance with Article 22. If such change increases or decreases the cost or time required for the Services, adjusted compensation and/or time will be mutually agreed upon in writing. No extra work shall be allowed or changes made by VENDOR, or paid for by CRA unless and until authorized by CRA in writing before the extra work and/or changes are begun. Claims for extra cost due to changes must be made in writing by VENDOR before it executes the work involved.
17. **FORCE MAJEURE:** Neither party shall be liable to the other party for delays in performing the Services or for the direct or indirect cost resulting from such delays that may result from fires, labor strikes, riots, acts of governmental authorities, extraordinary weather conditions or other natural catastrophes, demonstrated sample matrix interferences, insufficient sample volume provided, or any other cause beyond the reasonable control or contemplation of either party. Any extension of time granted to VENDOR pursuant hereto shall be VENDOR's sole and exclusive remedy for any claim resulting from a delay caused by such occurrences.
18. **TERMINATION:** CRA may terminate this Order (i) for its own convenience upon delivery of written notice to VENDOR effective upon receipt; or (ii) upon delivery of 7 days written notice to VENDOR in the event of any of the following, or of any other comparable event: insolvency of VENDOR; the initiation against VENDOR of proceedings under any law relating to bankruptcy, insolvency, or the relief of debtors; the loss of or failure of VENDOR to provide CRA with copies of the necessary permits, licenses, and approvals; any strike, picketing, or labor trouble involving VENDOR's personnel and affecting CRA, CLIENT, or VENDOR's ability to perform the Services; or the failure of VENDOR to diligently meet its other obligations under this Order. If VENDOR rectifies the said event prior to the expiry of the said notice period, the notice of termination shall be void and of no effect. If CRA terminates this Order for its convenience, VENDOR shall be paid for that portion of the Services satisfactorily completed as of the date of termination plus VENDOR's reasonable charges directly occasioned by the termination. No payment shall be due for Services not furnished.
19. **RIGHTS AND REMEDIES:** The rights and remedies of the parties hereunder are cumulative, and in addition to, not in lieu of, those which the parties have at law or in equity. Waiver of a breach of any provision of this Order shall not constitute a waiver of any other or future breach of the same provision or any other provision or of the entire Order. Failure of CRA to insist upon strict performance of any provision of this Order shall not be deemed a waiver of any rights CRA may have.
20. **CONFLICTS:** Should any conflict appear in the Order, priority shall be given in the following order: (i) the Order; (ii) this Exhibit A; and (iii) any other Exhibits listed in the Order.
21. **GOVERNING LAW:** This Order shall be governed by and construed in accordance with the laws of the state/province specified on the face of the Order.
22. **ENTIRE AGREEMENT:** This Order constitutes the entire agreement between the parties concerning the Services, and supercedes all prior written and oral negotiations, agreements, and representations. This Order may only be modified by a change order issued by CRA.

**ACORD****CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

04/22/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> King-Phillips Ins. Agcy., Inc. 9494 Southwest Freeway S#310 Houston, TX 77074-1419	<b>CONTACT NAME:</b> <b>PHONE (A/C, No, Ext):</b> (713)667-0333 <b>E-MAIL:</b> <b>ADDRESS:</b> <b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> Liberty Surplus Ins. Corp. <b>INSURER B:</b> Charter Oak Fire Ins. Co. <b>INSURER C:</b> Travelers Indemnity Co. <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>	<b>FAX (A/C, No):</b> (713)667-1560 <b>NAIC #</b>
<b>INSURED</b> Florida Testing Services, LLC dba Xenco Laboratories 2505 N. Falkenburg Road Tampa, FL 33619		

**COVERAGES** **CERTIFICATE NUMBER:** Florida Testing 13/14 **REVISION NUMBER:**

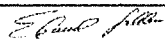
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> \$5000 Deductible <input checked="" type="checkbox"/> Pollution Incl. GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC		UVEDE104526113  PROFESSIONAL INCLUDED CLAIMS MADE  CAPPED AT \$6,000,000	04/21/2013	04/21/2014	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		BA0044R585-13	04/21/2013	04/21/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> DED <input type="checkbox"/> RETENTION \$ 10,000		UMEDE104527113	04/21/2013	04/21/2014	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ 4,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> Y N/A		UB00098R329	04/21/2013	04/21/2014	WC STATUTORY LIMITS E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Hired Car Physical Damage		BA0044R585-13	04/21/2013	04/21/2014	\$50,000 annually - \$100 ded. comprehensive & \$1000 ded. collision

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

These limits were in effect at inception of policy term.

**CERTIFICATE HOLDER****CANCELLATION**

Conestoga-Rovers & Associates (CRA) 13091 Pond Springs Road Suite A-100 Austin, TX 78729	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  Edward Saldivar/C07

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