GW -

29

MONITORING REPORTS Vacuum Field Unit DATE: 2006



Matthew P. Hudson Remediation Project Manager Abandonment Business Unit

Chevron Environmental Management Company 11111 S Wilcrest Dr Room 2104A Houston, TX 77009 Tel 281 561 3466 Fax 281 561 3841 mhkw@chevron.com

February 16, 2007

Mr. Wayne Price New Mexico Oil Conservation Division 1220 So. St. Francis Drive Santa Fe, New Mexico 87505

Subject: 2006

2006 Annual Groundwater Monitoring Report

Buckeye Vacuum Field Unit, Lea County, New Mexico

OGRID No. 4323

Dear Mr. Price:

Please find enclosed one copy of the above-referenced report. This report provides information and details on the groundwater monitoring activities completed by SECOR International, Inc. (SECOR) during 2006.

Should you have any questions concerning this report or the on-going work, please call myself at (281) 561-3466 or Eric Page with SECOR at (713) 937-7973.

Sincerely,

Matthew P. Hudson

Enclosure

cc: Ms. Patricia Caperton, NMOCD (electronic copy)

Mr. Eric Page, SECOR (cover letter only)

SECOR INTERNATIONAL INCORPORATED

January 18, 2007

Mr. Scott Toner
Environmental Project Manager
Chevron Environmental Management Company
MidContinent Business Unit
11111 South Wilcrest
Houston, TX 77099

RE:

2006 Groundwater Monitoring Report

Buckeye Vacuum Field Unit

Lea County, NM 89CH.49529.07

Dear Mr. Toner:

Enclosed are two copies of the 2006 Groundwater Monitoring Report for the Buckeye Vacuum Field Unit (final report) as well as two copies on CD containing the full report contents.

If you have any comments or questions regarding the report content or conclusion, please feel free to contact me by phone at (713) 937-7973 x-227.

Sincerely,

SECOR International Incorporated

Eric Page

Sr. Project Manager

Duk Mc Kuz Gale McKinley

Staff Geologist

Attachments:

2006 Groundwater Monitoring Report, Buckeye Vacuum Field Unit, Lea County, NM

Co

SECOR file

2006 ANNUAL GROUNDWATER MONITORING REPORT BUCKEYE VACUUM FIELD UNIT LEA COUNTY, NM January 2007 89CH.49386.07

TABLE OF CONTENTS

1.0	INTRODUCTION	1
	1.1 Site Setting	1
	1.2 Environmental and Remediation History	
2.0	CURRENT FIELD ACTIVITIES	
	2.1 Monitor Well Gauging	3
	2.2 Groundwater Sample Collection	
	2.3 Groundwater Remediation and Waste Management	3
3.0	ANALYTICAL RESULTS	5
	3.1 Chloride	5
	3.1.1 January 2006 Sampling Event	
	3.1.2 April 2006 Sampling Event	5
	3.1.3 October 2006 Sampling Event	
	3.2 Total Dissolved Solids	
4.	SUMMARY AND RECOMMENDATIONS	

Figures

Figure 1 - Site Location Map

Figure 2 - Site Plan

Figure 3 - Potentiometric Groundwater Surface Map: April 2006

Figure 4 - Potentiometric Groundwater Surface Map: October 2006

Figure 5 - Isopleth Map of Chloride Concentrations in Groundwater: April 2006

Figure 6 - Isopleth Map of Chloride Concentrations in Groundwater: October 2006

Figure 7 - Historical Chloride Trend Chart: TW-23

Figure 8 - Historical Chloride Trend Chart: RW-2

Figure 9 - Historical Chloride Trend Chart: RW-3

Tables

Table 1 - Historical Groundwater Elevations

Table 2 – Depth to Groundwater and Barrels Pumped (RW-3) October 2005-August 2006

Table 3 - Summary of Chloride and Total Dissolved Solids Analytical Results

Appendices

Laboratory Analytical Data January 14, 2006 Laboratory Analytical Data April 8, 2006 Laboratory Analytical Data October 5, 2006

1.0 INTRODUCTION

1.1 Site Setting

The Buckeye Vacuum Field Unit site is located in Unit Letter O (SW/4, SE/4), Section 36, Township 17 South, Range 34 East, Lea County, New Mexico (**Figure 1**). The site is immediately south of County Road 57 and was originally owned and operated by Texaco Exploration and Production Inc. (Texaco) and operated as the Buckeye Vacuum Unit. Chevron North America Exploration and Production Company (Chevron) retains environmental liability. The Buckeye Compressor Station is located to the north of the site across County Road 57. The overall site plan is shown on **Figure 2**.

1.2 Environmental and Remediation History

In 1989, a total of 23 monitor wells were installed at the site to determine the source, and delineate the extent of chloride impact to groundwater. Two extraction wells (RW-1 and RW-2) were also installed and continuously pumped to remediate groundwater at the site. A casing leak in a production well located on the property (VG SAU #58) was determined to be the source of the chloride impacting the groundwater. The production well was repaired in 1990 and plugged and abandoned in 2000.

Groundwater monitoring of all monitor wells (TW-1 through TW-23) and the two recovery wells (RW-1 and RW-2) was conducted from 1990 through 1998. Thirteen monitor wells were plugged and abandoned in 1999, and nine monitor wells were sampled on a quarterly basis. Monitor well TW-23 was sampled on a monthly basis. As directed by the New Mexico Oil Conservation Division (NMOCD), six monitor wells and the two extraction wells were sampled on a semi-annual basis during 2000 and 2001, and monitor well TW-23 was sampled quarterly. Pumping from wells RW-1 and RW-2 ceased in 2001 and a third extraction well (RW-3), located in the vicinity of monitor well TW-23, was installed in 2001. Groundwater recovery from extraction well RW-3 was initiated shortly after installation.

Following a sampling schedule directed by the NMOCD, groundwater monitoring continued at the site during 2002. Chevron submitted a Groundwater Monitoring Summary and Closure Report to the NMOCD on December 20, 2002, and requested closure. Site closure was denied by the NMOCD in a letter dated March 19, 2003, and groundwater monitoring was continued as directed.

Chevron conducted groundwater monitoring at the site during 2003 and submitted an *Annual Groundwater Monitoring Report*, dated May 10, 2004, to the NMOCD. Based on the contents of that report, CEMC proposed a reduced sampling schedule, with seven monitor wells (TW-10, TW-11, TW-13, TW-14, TW-17, TW-19, and TW-20) to be sampled for chloride and total dissolved solids (TDS) semi-annually, and three monitor wells (TW-9, TW-15, and TW-23) to be sampled on a quarterly basis. The monitoring schedule was approved by NMOCD on September 30, 2004.

Following the 2004 monitoring schedule, groundwater samples were collected from three monitor wells (TW-9, TW-15, and TW-23) in January 2006 and from twelve monitor and recovery wells (TW-9 TW-10, TW-11, TW-13, TW-14, TW-15, TW-17, TW-19, TW-20, TW-23, RW-2 and RW-3) wells in April and October 2006. The results are included in this report.

2.0 CURRENT FIELD ACTIVITIES

As per the *Annual Groundwater Monitoring Report* of April 25, 2005, Chevron proposed to continue groundwater monitoring the ten monitor wells until chloride concentrations have been remediated to below the New Mexico Water Quality Control Commission (NMWQCC) standards for a minimum of four consecutive quarters or four consecutive longer term sampling events.

2.1 Monitor Well Gauging

Historical groundwater elevations for each sampling event are provided on **Table 1**. Potentiometric surface maps for April and October 2006 are provided as **Figures 3 and 4**. Over the course of 2006, groundwater elevations ranged from 3858.81 to 3860.61 feet above mean sea level across the site. The groundwater flow direction is toward the northeast, with an average hydraulic gradient of approximately 0.002 vertical feet per horizontal foot.

2.2 Groundwater Sample Collection

Static groundwater elevation measurements were taken prior to each sampling event with an electronic water/hydrocarbon interface probe. Groundwater samples were collected on January 12, 2006 from monitor wells TW-9, TW-15 and TW-23. The groundwater samples were delivered under chain-of-custody control to Lancaster Laboratories, Lancaster, PA and analyzed for chloride (EPA Method 300.0) and total dissolved solids (TDS) (EPA Method 160.1).

On April 6 and October 2-3, 2006 groundwater samples were collected from all ten monitor wells and two extraction wells at the site. Prior to sample collection, the wells were purged of a minimum of three casing volumes. The groundwater samples were collected using disposable PVC bailers following successful purging. The samples were then transferred to sample containers provided by the laboratory, labeled by the field groundwater sampler, placed on ice in a cooler, kept at a temperature of 4°C, and shipped under chain-of-custody to Lancaster Laboratories in Lancaster, PA for laboratory analysis. The groundwater samples were analyzed for chloride (EPA Method 300.0) and TDS (EPA Method 160.1). The results of all the 2006 sampling events are discussed in Section 3.0 of this report. Laboratory analytical reports for each sampling event of 2006 are included in the Appendices.

Purged groundwater from the sampling activities was disposed at an NMOCD permitted salt water disposal facility operated by Chapparel Services, Inc., located in Eunice, New Mexico.

2.3 Groundwater Remediation and Waste Management

Groundwater is currently pumped from extraction well RW-3 on an alternating pumping (six hours on) and recovery (48 hours off) schedule to flush residual chloride from the capillary zone in the vicinity of VG SAU #58. The extracted groundwater is used as non-contact cooling water at the Buckeye Compressor Station, located north of the site, across County Road 57. Depth to groundwater measurements have been collected bi-weekly from October 2005 to August 2006 from all monitor and recovery wells on the site to observe any effects in groundwater levels caused by the pumping of extraction well RW-3. These results are provided in **Table 2**. Also

included in the table is the recorded recovery from extraction well RW-3 during this period. The chloride plume (concentrations exceeding 250 mg/L) has been localized around TW-23 and RW-3.

3.0 ANALYTICAL RESULTS

Analytical results for 2006 are presented in **Table 3** which also includes historical data. The groundwater samples were analyzed for chloride (EPA Method 300.0) and TDS (EPA Method 160.1). The NMOCD provides regulatory oversight for this site, but uses the remediation standards set by the NMWQCC for chloride (250 mg/L) and for TDS (1,000 mg/L).

3.1 Chloride

3.1.1 January 2006 Sampling Event

As per the sampling schedule approved by the NMOCD, chloride and TDS concentrations were measured in groundwater samples collected from monitor wells TW-9, TW-15 and TW-23 on January 12, 2006. Chloride concentrations were 49.6 mg/L, 144 mg/L and 272 mg/L, respectively. These concentrations were lower than those measured on October 27, 2005. TDS concentrations were also lower than those measured in October 2005. Monitor well TW-23 continues to exhibit a TDS concentration above the NMWQCC standard of 1,000 mg/L.

3.1.2 April 2006 Sampling Event

An isopleth map of chloride concentrations for the April 2006 sampling event is presented in **Figure 5**. Chloride concentrations measured in twelve groundwater samples collected on April 5-6, 2006 ranged from 34.3 mg/L (TW-20) to 791 mg/L (RW-3). All chloride concentrations from the groundwater samples collected were below the NMWQCC standard of 250 mg/L with the exception of the groundwater sample collected from recovery well RW-3.

3.1.3 October 2006 Sampling Event

An isopleth map of chloride concentrations for the October 2006 sampling event is presented in **Figure 6.** Chloride concentrations measured in twelve groundwater samples collected on October 2-3, 2006 ranged from 33.2 mg/L (TW-19) to 1,060 mg/L (RW-3). All chloride concentrations from the groundwater samples collected were below the NMWQCC standard of 250 mg/L with the exception of the groundwater samples collected from recovery well RW-3 (1,060 mg/L) and monitor well MW-23 (253 mg/L).

Historical chloride data trend charts for monitor well TW-23 and recovery wells RW-2 and RW-3 are included as **Figures 7, 8 and 9,** respectively.

3.2 Total Dissolved Solids

TDS concentrations were above the NMWQCC remediation standard of 1,000 mg/L for groundwater samples collected from TW-23 and RW-3 during 2006. The groundwater sample collected on January 12, 2006 from monitor well TW-23 exhibited a TDS concentration of 1,090 mg/L. Groundwater samples collected from TW-23 during the April and October 2006 sampling events exhibited TDS concentrations of 1,070 mg/L for both events. Extraction well RW-3 exhibited TDS concentrations of 1,700 mg/L in the groundwater sample collected on April 7,

2006 and 1,930 mg/L in the groundwater sample collected on October 2, 2006. All other TDS concentrations measured in the groundwater samples collected during 2006 were below the NMWQCC standard.

4. SUMMARY AND RECOMMENDATIONS

The following findings and conclusions can be drawn from the 2006 groundwater monitoring events:

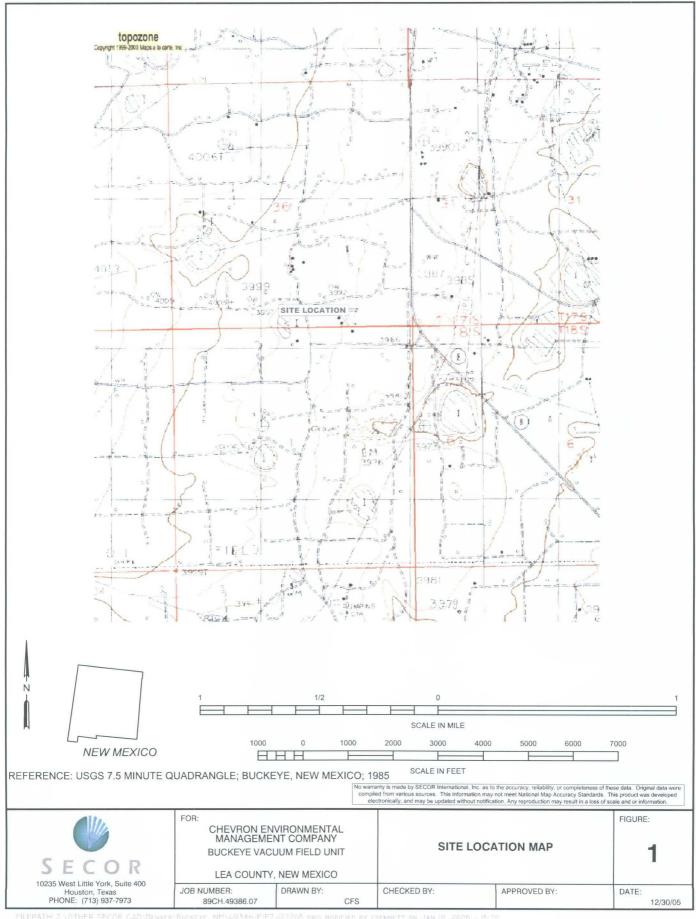
- Depth to groundwater ranged from 123.61 feet (TW-15) to 129.59 (TW-20) from below top of casing (TOC) on April 3, 2006.
- Depth to groundwater ranged from 123.59 feet (TW-15) to 129.20 (TW-20) from below TOC on October 3, 2006.
- The groundwater flow direction is toward the northeast, with an approximate hydraulic gradient of 0.002 vertical feet per horizontal foot.
- All monitor wells except for TW-23 and extraction wells RW-2 and RW-3, have exhibited chloride concentrations below the NMWQCC standard of 250 mg/L for a minimum of four consecutive quarters.
- Monitor well TW-23 exhibited chloride concentrations of 272 mg/L (January 2006), 35.2 mg/L (April 2006) and 253 mg/L (October 2006). Concentrations were above the 250 mg/L NMWQCC state standard for two of the events. Extraction well RW-3 exhibited chloride concentrations of 791 mg/L (April 2006) and 1,060 mg/L (October 2006), also above the state standard. Chloride concentrations remain elevated in samples collected from RW-3, however, they are trending lower in samples collected from monitor well TW-23.
- Extraction well RW-2 has exhibited chloride concentrations below the NMWQCC standard since groundwater samples were first collected on May 28, 2004. The only exception was the sampling event in October 2005, where the chloride concentration was measured at 264 mg/L. Chloride concentrations have been below the NMWQCC standard in groundwater samples collected from RW-2 in 2006.
- Groundwater recovery from extraction well RW-3 is currently ongoing and is having a
 positive impact on the chloride concentrations measured in TW-23.
- TDS concentrations measured in the groundwater samples collected during 2006 were below the NMWQCC standard of 1,000 mg/L for all of the monitor or extraction wells except for groundwater samples collected from TW-23 and RW-3. The highest TDS concentration measured from TW-23 was 1,090 (January 12, 2006) and from RW-3 was 1,930 mg/L (October 2, 2006).

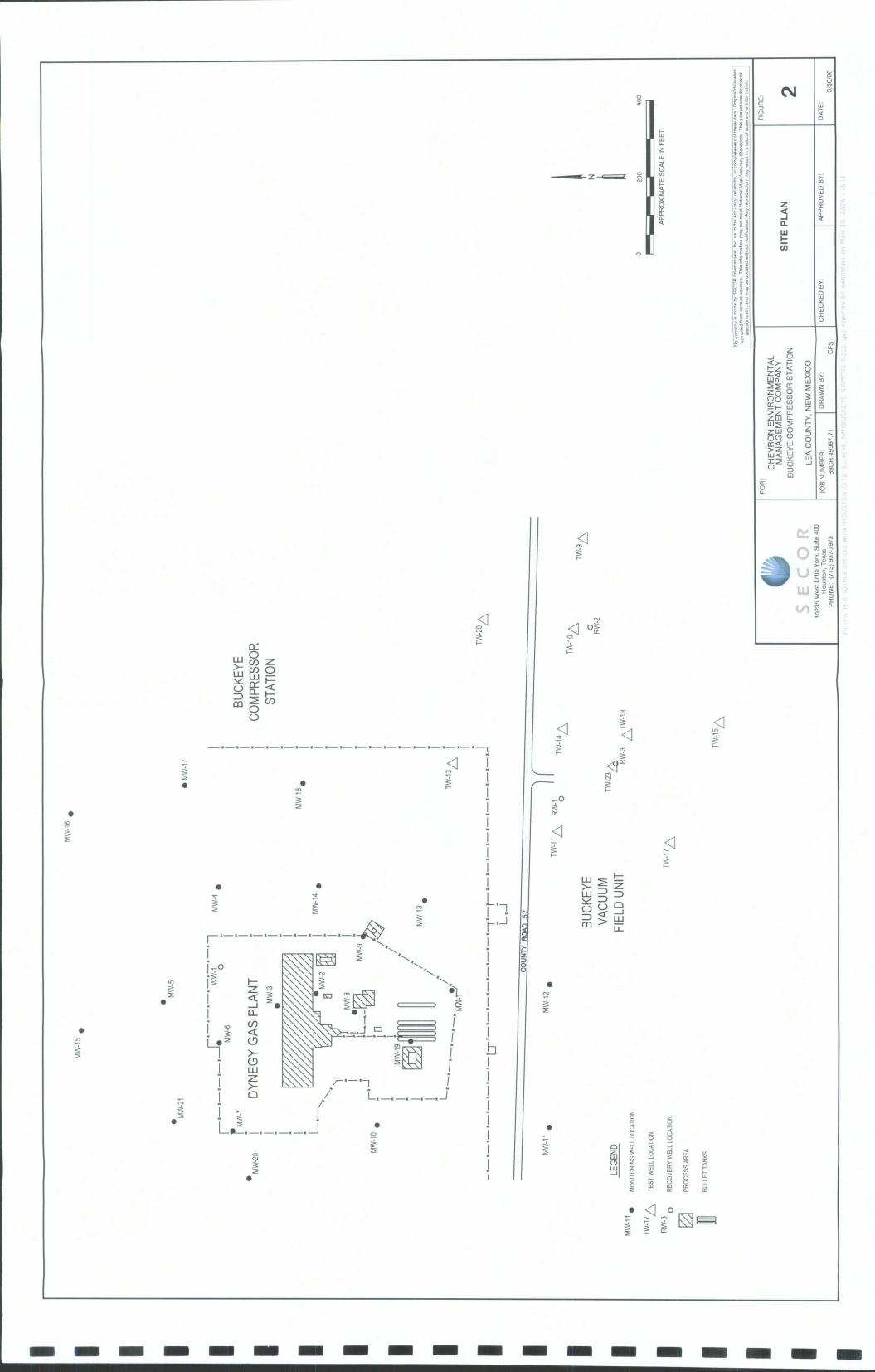
As per the *Annual Groundwater Monitoring Report* of April 25, 2005, Chevron proposed to continue groundwater monitoring the ten monitor wells until groundwater concentrations of chloride were below the NMWQCC standard for four consecutive guarters.

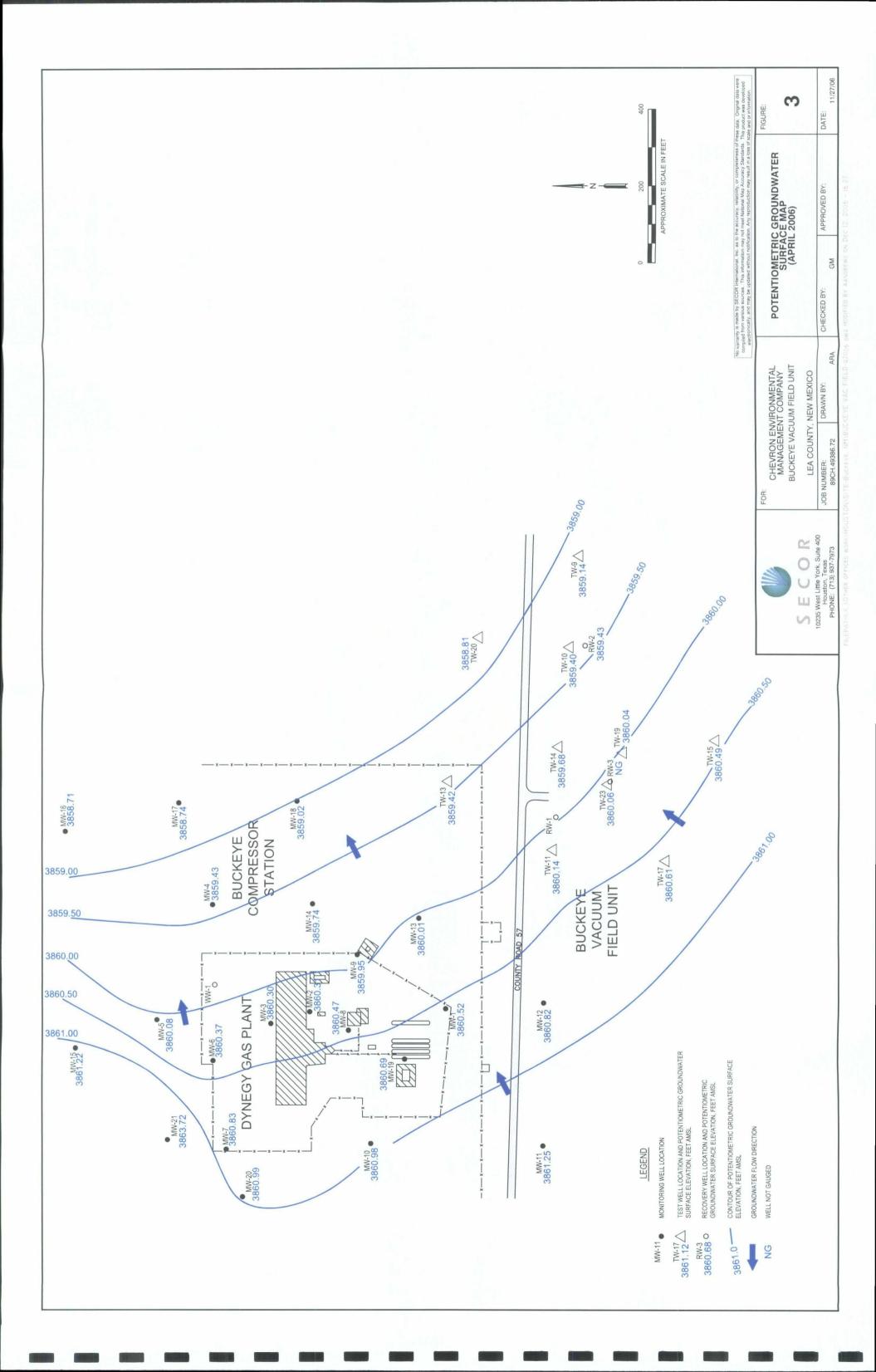
Monitor wells TW-10, TW-11, TW-13, TW-14, TW-17, TW-19 and TW-20 have shown chloride concentrations below the standard of 250 mg/L for the past three years. Chevron proposes that

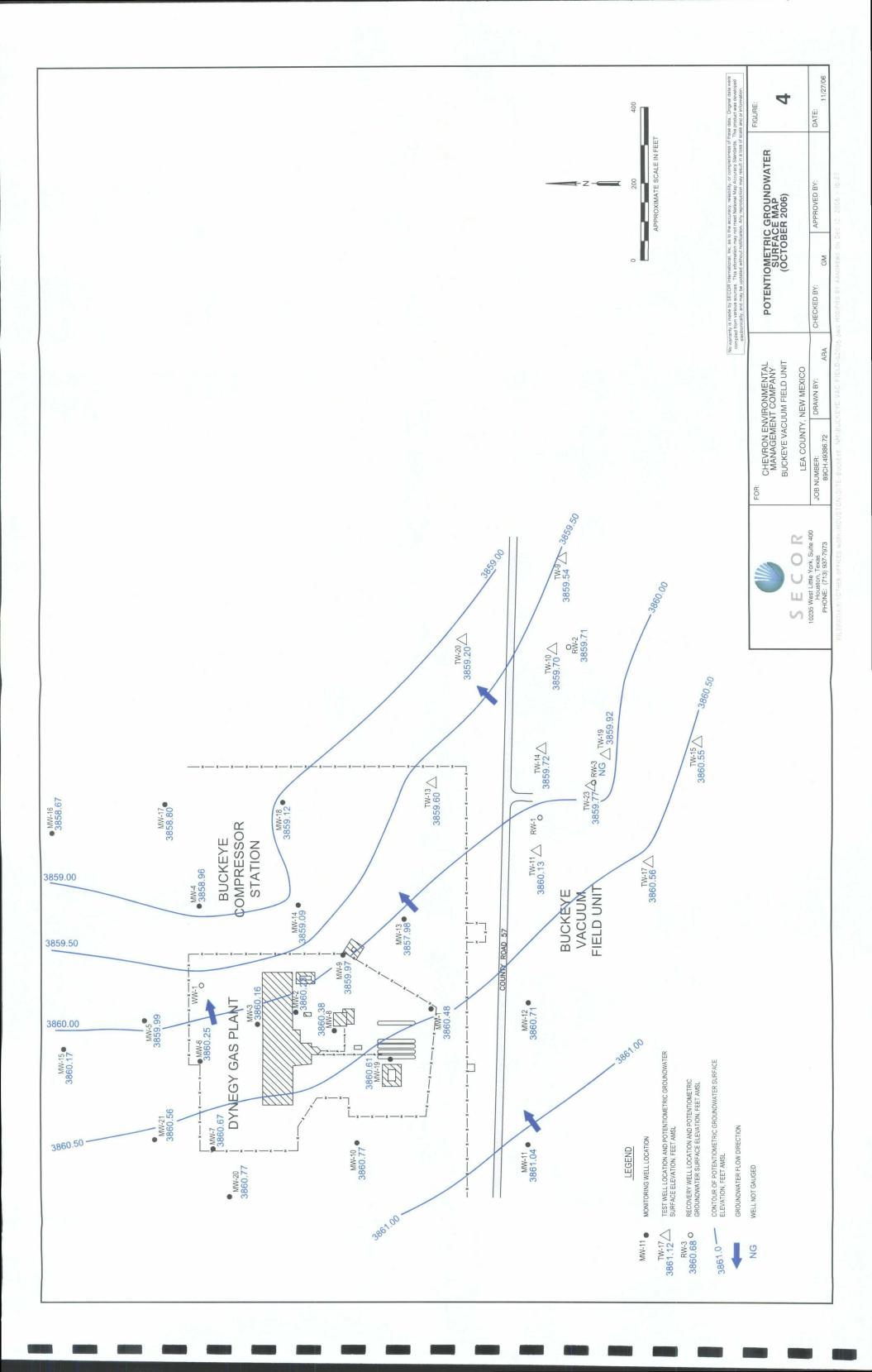
these wells continue to be sampled for chloride and TDS on a semi-annual basis. TW-15 has exhibited chloride concentrations below 150 mg/L during 2006 and will remain on the quarterly sampling schedule. Monitor well TW-23 has exhibited lower chloride concentrations in 2006 than in past years, but, for the exception of one sampling event, the concentrations are at or above the state standard. Monitor well TW-9 has exhibited chloride concentrations around 50 mg/L for the last seven quarters.

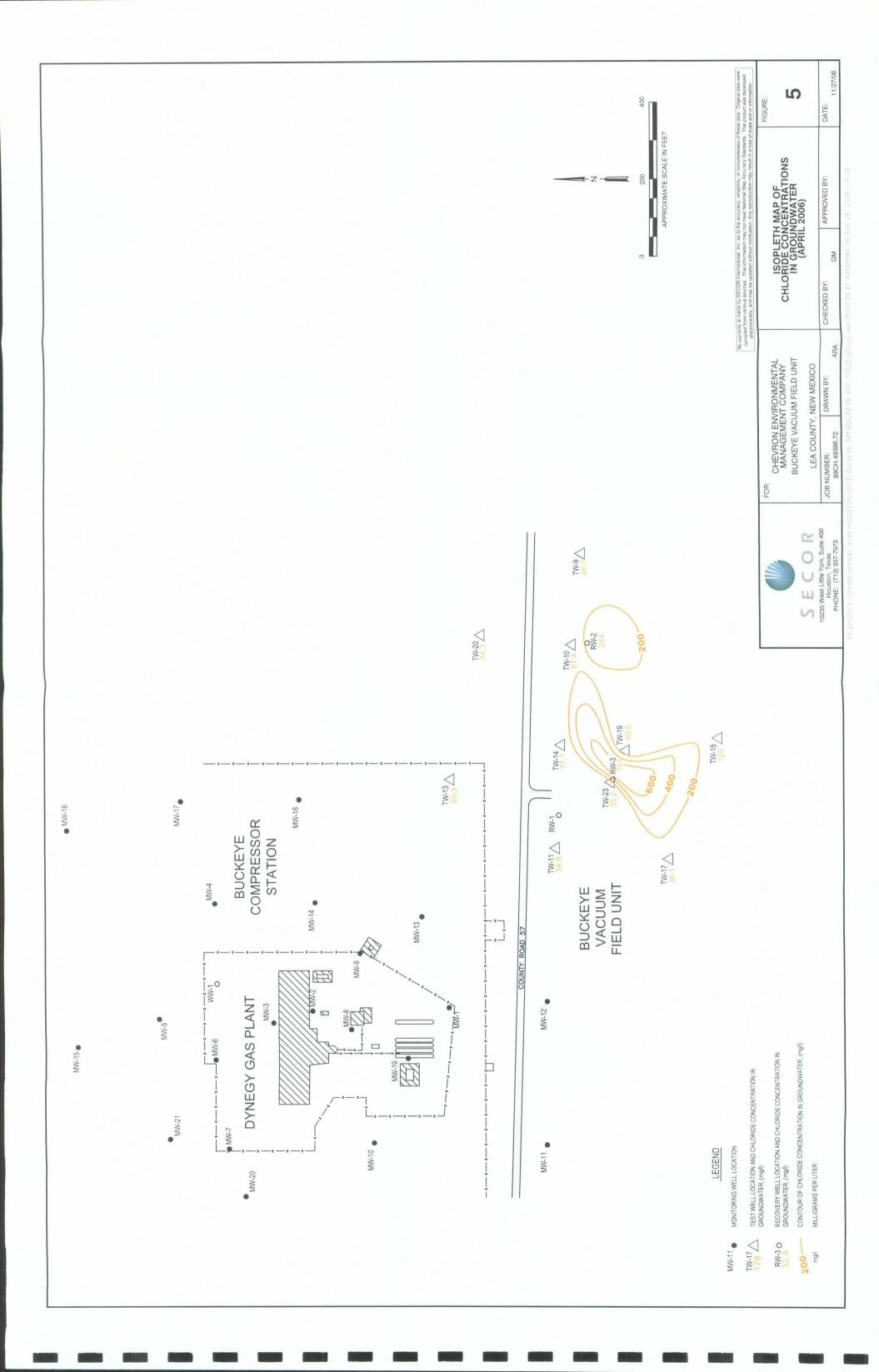
FIGURES

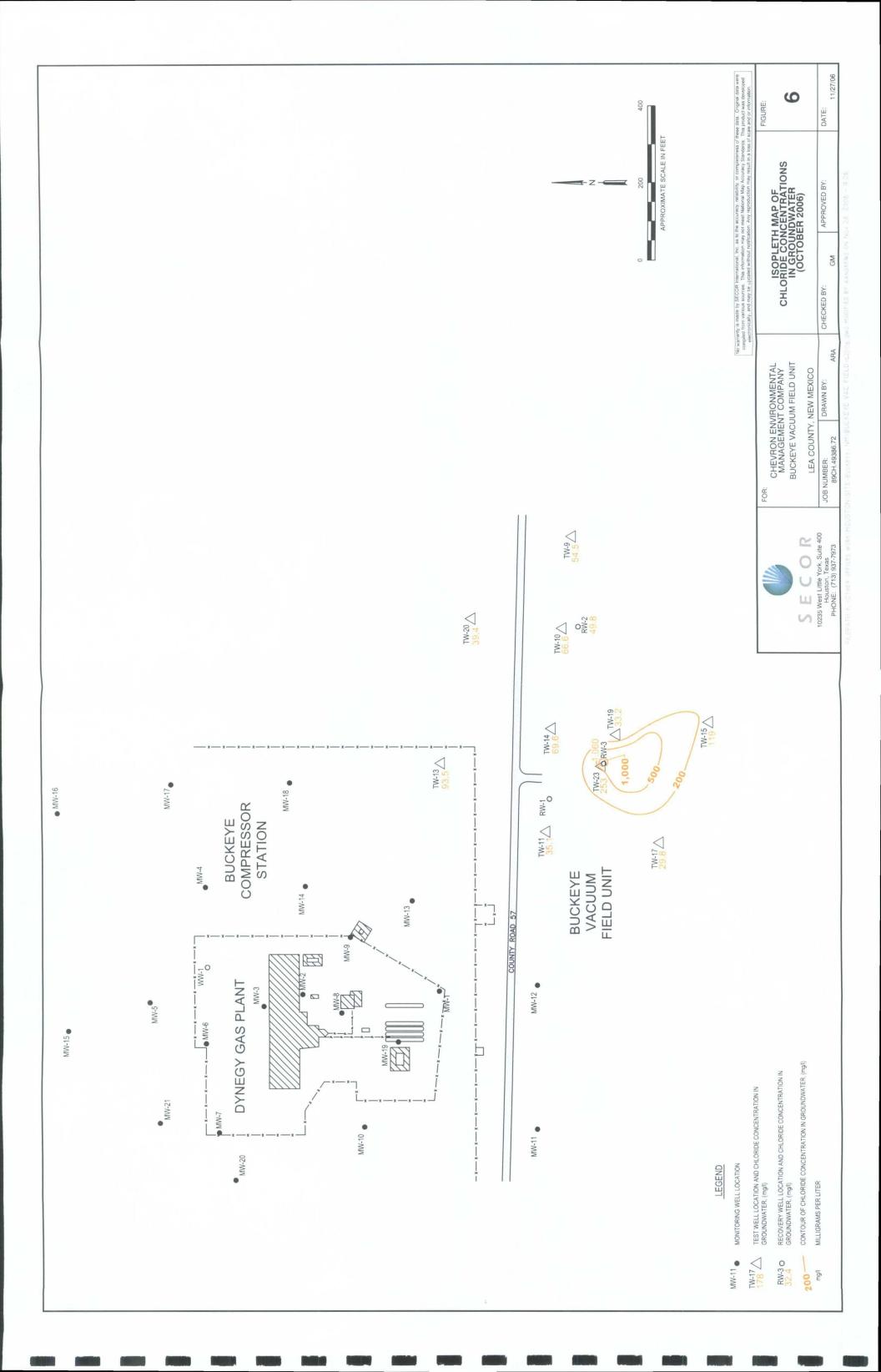


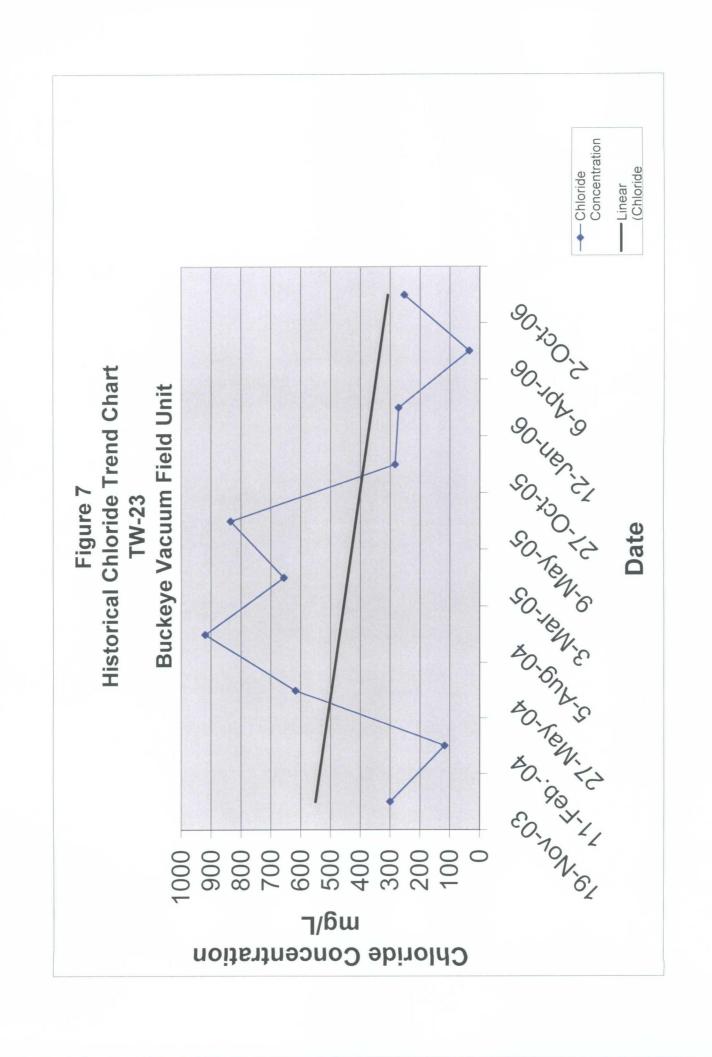


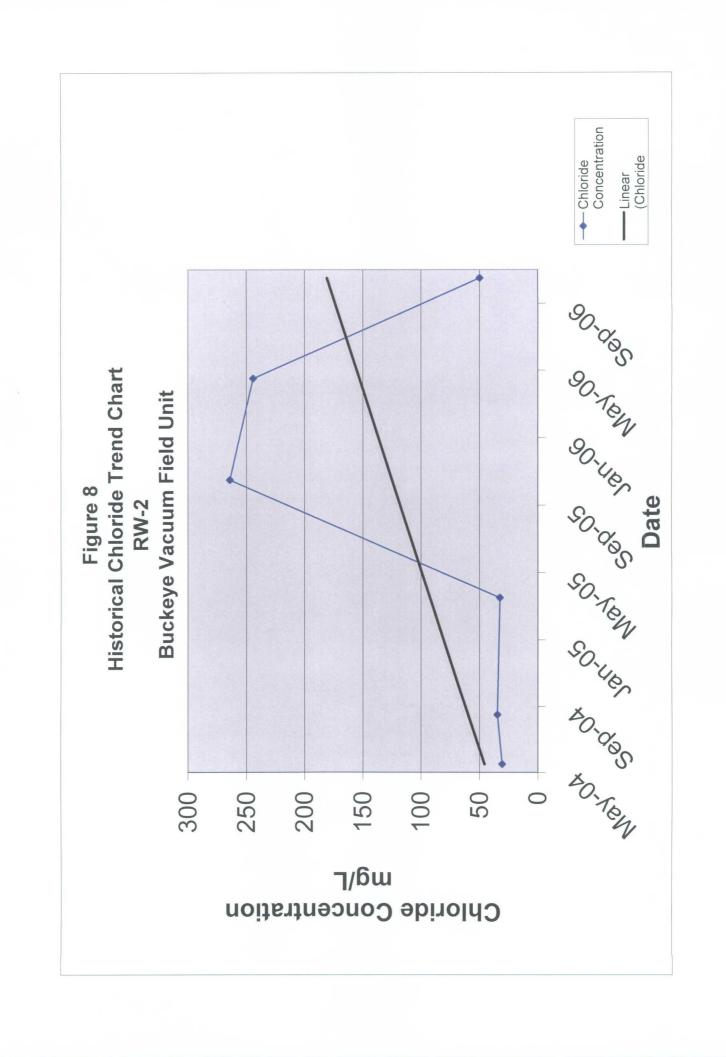


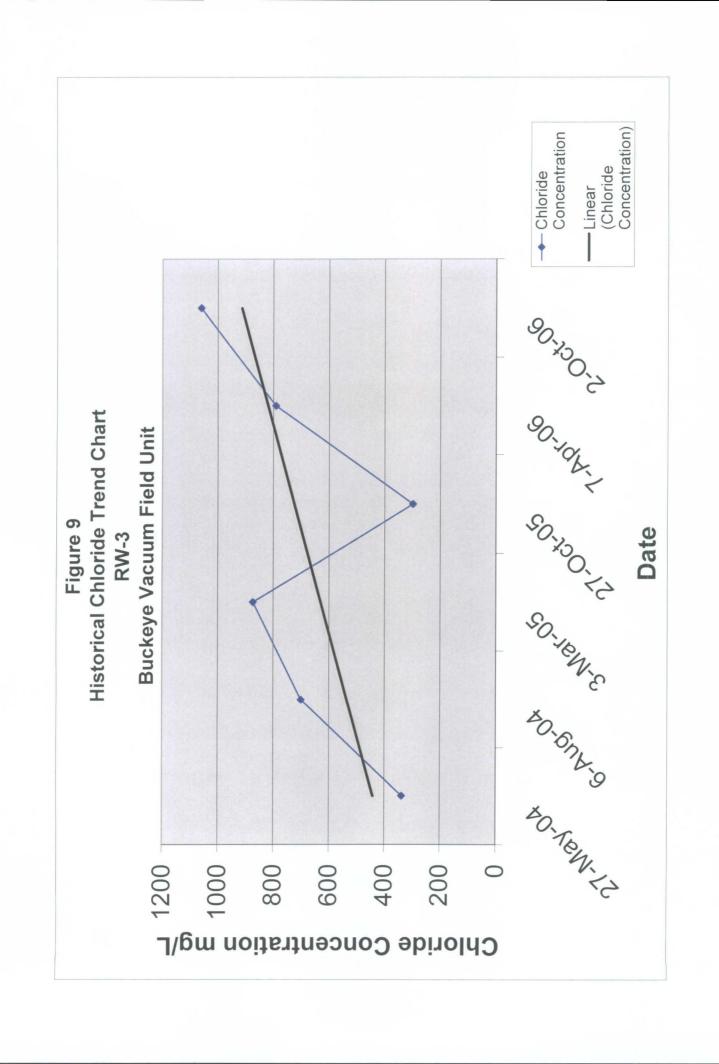












TABLES

Table 1 **Historical Groundwater Elevations Buckeye Vacuum Field Unit** Lea County, NM

Monitorina		TOC	Depth	Water	Monitoring		TOC	Depth	Water
Monitoring Well	Date	Elevation	To Water	water Elevation	Well	Date	Elevation	To Water	Elevation
ID	Gauged	(ft.)	(ft.)	(ft.)	ID	Gauged	(ft.)	(ft.)	(ft.)
	05/15/03	3987.04		3987.04		05/15/03	3986.77	126.78	3859.99
	11/18/03	3987.04		3987.04		11/19/03	3986.77	127.28	3859.49
[02/11/04	3987.04		3987.04		02/11/04	3986.77	127.32	3859.45
1	05/28/04	3987.04	126.82	3860.22	TW-14	05/28/04	3986.77	126.44	3860.33
RW-2	08/06/04	3987.04	126.81	3860.23		08/05/04	3986.77	126.48	3860.29
	03/03/05	3987.04	126.90	3860.14		03/03/05	3986.77	125.55 125.43	3861.22
	05/09/05 11/01/05	3987.04 3987.04	125.84 NG	3861.20 NG		05/09/05 11/01/05	3986.77 3986.77	126.24	3861.34 3860.53
	04/03/06	3987.04	127.61	3859.43		04/03/06	3986.77	127.09	3859.68
	10/03/06	3987.04	127.33	3859.71		10/03/06	3986.77	127.05	3859.72
	10,00,00		12.700			05/15/03	3984.14	123.50	3860.64
	05/15/03	3984.18		3984.18		11/19/03	3984.14	123.76	3860.38
	11/18/03	3984.18		3984.18		02/11/04	3984.14	123.34	3860.80
	02/11/04	3984.18		3984.18	1	05/27/04	3984.14	123.06	3861.08
	05/27/04	3984.18	123.50	3860.68	•	08/05/04	3984.14	123.07	_3861.07
	08/06/04	3984.18	123.58	3860.60	TW-15	03/03/05	3984.14	122.18	3861.96
RW-3	03/03/05	3984.18	122.67	3861.51	i	05/09/05	3984.14	122.13	3862.01
ļ	05/09/05 11/01/05	3984.18 3984.18	122.54 126.72	3861.64 3857.46		11/01/05 01/12/06	3984.14 3984.14	122.68 123.33	3861.46 3860.81
	04/03/06	3984.18	NG	NG		04/03/06	3984.14	123.65	3860.49
1	10/03/06	3984.18	NG	NG		09/06/06	3984.14	123.61	3860.53
1	2,00,00	, 2300	·			10/03/06	3984.14	123.59	3860.55
	05/15/03	3988.69	129.01	3859.68		05/15/03	3986.01	122.87	3863.14
	11/18/03	3988.69	128.97	3859.72		11/19/03	3986.01	125.64	3860.37
	02/11/04	3988.69	128.62	3860.07		02/11/04	3986.01	125.15	3860.86
	05/27/04	3988.69	128.65	3860.04		05/28/04	3986.01	124.89	3861.12
	08/06/04	3988.69	128.64	3860.05	7741.47	08/05/04	3986.01	124.88	3861.13
TW-9	03/03/05 05/09/05	3988.69 3988.69	127.79 128.67	3860.90 3860.02	TW-17	03/03/05 05/09/05	3986.01 3986.01	124.06 123.97	3861.95 3862.04
	11/01/05	3988.69	128.62	3860.02		11/01/05	3986.01	124.50	3861.51
1	01/12/06	3988.69	129.05	3859.64		04/03/06	3986.01	125.40	3860.61
	04/03/06	3988.69	129.55	3859.14		10/03/06	3986.01	125.45	3860.56
	09/06/06	3988.69	129.20	3859.49					
1	10/03/06	3988.69	129.15	3859.54		05/15/03	3985.70	121.80	3863.90
	05/15/03	3987.87	127.99	3859.88		11/19/03	3985.70	126.25	3859.45
	11/19/03	3987.87	128.11	3859.76	. 1	02/11/04	3985.70	125.31	3860.39
	02/11/04	3987.87	127.69	3860.18	TW-19	05/27/04	3985.70	125.11	3860.59
	05/28/04	3987.87	127.66	3860.21		08/05/04	3985.70	125.14 124.26	3860.56
TW-10	08/06/04 03/03/05	3987.87 3987.87	127.69 126.80	3860.18 3861.07		03/03/05 05/09/05	3985.70 3985.70	124.26	3861.44 3861.68
	05/09/05	3987.87	126.68	3861.19		11/01/05	3985.70	124.79	3860.91
	11/01/05	3987.87	127.54	3860.33		04/03/06	3985.70	125.66	3860.04
	04/03/06	3987.87	128.47	3859.40		10/02/06	3985.70	125.78	3859.92
	10/03/06	3987.87	128.17	3859.70					
	05/15/03	3989.11	128.97	3860.14		05/15/03	3988.40	129.07	3859.33
	_11/19/03	3989.11	129.14	3859.97	·	11/18/03	3988.40	128.93	3859.47
1	02/11/04	3989.11	128.67	3860.44		02/11/04	3988.40	128.69	3859.71
]	05/28/04	3989.11	128.39	3860.72		05/27/04	3988.40	128.69	3859.71
TW-11	08/05/04 03/03/05	3989.11 3989.11	128.42 127.56	3860.69 3861.55	TW-20	08/06/04 03/03/05	3988.40 3988.40	128.67 127.79	3859.73 3860.61
	05/09/05	3989.11	127.30	3861.70		05/09/05	3988.40	127.69	3860.71
	11/01/05	3989.11	128.11	3861.00	•	11/01/05	3988.40	128.74	3859.66
	04/03/06	3989.11	128.97	3860.14		04/03/06	3988.40	129.59	3858.81
	10/03/06	3989.11	128.98	3860.13		10/03/06	3988.40	129.20	3859.20
						05/15/03	3984.58	124.42	3860.16
	05/15/03	3988.73	128.85	3859.88	 	11/19/03	3984.58	125.95	3858.63
1	11/18/03	3988.73	128.89	3859.84		02/11/04	3984.58	124.16	3860.42
	02/11/04	3988.73	128.67	3860.06		05/27/04 08/05/04	3984.58	123.94	3860.64
	05/27/04 08/06/04	3988.73 3988.73	128.67 128.66	3860.06 3860.07		08/05/04	3984.58 3984.58	124.03 123.10	3860.55 3861.48
TW-13	03/03/05	3988.73	127.74	3860.99	TW-23	05/09/05	3984.58	122.98	3861.60
	05/09/05	3988.73	127.68	3861.05	•	11/01/05	3984.58	123.71	3860.87
Į į	11/01/05	3988.73			01/12/06	3984.58	124.06	3860.52	
{	04/03/06	3988.73	129.31	3859.42		04/03/06	3984.58	124.52	3860.06
	10/03/06	3988.73	129.13	3859.60		09/06/06	3984.58	124.52	3860.06
					·	10/02/06	3984.58	124.81	3859.77

Note: TOC - Top of casing NG - Not gauged Elevations are from mean sea level

Manitaring Wall	Comple Date	Depth-to-
Monitoring Well	Sample Date	Groundwater
	10 Oct 05	Feet TOC 128.38
	18-Oct-05	120.30
	27-Oct-05	400.60
	1-Nov-05	128.62
	29-Nov-05	129.24
•	14-Dec-05	129.25
	5-Jan-06	129.41
•	12-Jan-06	129.03
	25-Jan-06	129.30
	23-Feb-06	129.31
	8-Mar-06	129.32
TW-9	20-Mar-06	129.45
	19-Apr-06	129.54
	8-May-06_	129.51
	7-Jun-06	129.88
	19-Jun-06	129.49
	11-Jul-06	129.27
	8-Aug-06	129.24
		<u> </u>
	18-Oct-05	127.33
	27-Oct-05	
	1-Nov-05	127.54
	29-Nov-05	128.09
	14-Dec-05	128.12
	5-Jan-06	128.23
·	12-Jan-06	127.94
	25-Jan-26	128.15
	23-Feb-06	128.23
	8-Mar-06	128.29
T04/40	20-Mar-06	128.31
TW-10	19-Apr-06	128.43
	8-May-06	128.38
	7-Jun-09	128.63
	19-Jun-06	128.44
	11-Jul-06	128.28
	8-Aug-06	128.23
Į.		
Ī		
·	<u> </u>	I

Monitoring Well	Sample Date	Depth-to-
	•	Groundwater
		Feet TOC
1 12 12	18-Oct-05	127.98
	27-Oct-05	
	1-Nov-05	128.11
	29-Nov-05	128.57
	14-Dec-05	128.63
	5-Jan-06	128.93
	12-Jan-06	128.49
	25-Jan-06	128.67
	23-Feb-06	128.81
TW-11	8-Mar-06	128.90
1 100-11	20-Mar-06	128.82
	19-Apr-06	129.03
	8-May-06	128.85
	7-Jun-06	129.20
	19-Jun-06	129.05
	11-Jul-06	129.04
	8-Aug-06	129.00
	18-Oct-05	128.26
	26-Oct-05	
	1-Nov-05	128.43
	29-Nov-05	128.90
	14-Dec-05	128.95
ĺ	5-Jan-06	129.18
	12-Jan-06	128.88
	25-Jan-06	129.01
	23-Feb-06	129.11
TW-13	8-Mar-06	129.08
1 1 1 1 3	20-Mar-06	129.14
	19-Apr-06	129.33
	8-May-06	129.21
	7-Jun-06	129.47
	19-Jun-06	129.33
	11-Jul-06	129.21
,	8-Aug-06	129.17
		·

Monitoring Well	Sample Date	Depth-to-
monitoring Wen	Gampie Bate	Groundwater
		Feet TOC
<u> </u>	18-Oct-05	126.03
	27-Oct-05	
	1-Nov-05	126.24
	29-Nov-05	126.68
	14-Dec-05	126.74
	5-Jan-06	127.03
	12-Jan-06	126.58
	25-Jan-06	126.75
	23-Feb-06	126.83
TW-14	8-Mar-06	127.08
1 44-14	20-Mar-06	126.91
	19-Apr-06	127.10
	8-May-06	126.94
	7-Jun-06	127.33
	19-Jun-06	127.11
	11-Jul-06	127.06
	8-Aug-06	127.01
	18-Oct-05	122.61
	27-Oct-05	·
	1-Nov-05	122.68
	29-Nov-05	123.17
	14-Dec-05	123.22
	5-Jan-06	123.48
	12-Jan-06	123.33
	25-Jan-06	123.35
·	23-Feb-06	123.46
TW-15	8-Mar-06	123.47
	20-Mar-06	123.50
	19-Apr-06	123.69
	8-May-06	123.59
	7-Jun-06	123.84
	19-Jun-06	123.73
	11-Jul-06	123.69
	8-Aug-06	123.62
	<u> </u>	

Monitoring Well	Sample Date	Depth-to- Groundwater
		Feet TOC
	18-Oct-05	124.43
	26-Oct-05	
	1-Nov-05	124.50
	29-Nov-05	124.93
	14-Dec-05	124.98
	5-Jan-06	125.30
. •	12-Jan-06	124.98
•	25-Jan-06	125.11
TW-17	23-Feb-06	125.21
1 144-17	8-Mar-06	125.23
	20-Mar-06	125.22
	19-Apr-06	125.45
	8-May-06	125.34
	7-Jun-06	125.60
	19-Jun-06	125.44
	11-Jul-06	125.47
	8-Aug-06	125.39
	18-Oct-05	124.66
	27-Oct-05	
	1-Nov-05	124.79
· ·	29-Nov-05	125.27
]	14-Dec-05	125.31
	5-Jan-06	125.62
	12-Jan-06	125.20
	25-Jan-06	125.32
	23-Feb-06	125.44
tw-19	8-Mar-06	125.68
	20-Mar-06	125.50
	19-Apr-06	125.72
	8-May-06	125.55
	7-Jun-06	125.98
	19-Jun-06	125.76
	11-Jul-06	125.78
	8-Aug-06	125.72

Monitoring Well	Sample Date	Depth-to- Groundwater
		Feet TOC
	18-Oct-05	128.43
	26-Oct-05	
	1-Nov-05	128.74
	29-Nov-05	129.28
	14-Dec-05	129.24
	5-Jan-06	129.44
,	12-Jan-06	129.00
	25-Jan-06	129.28
	23-Feb-06	129.35
TW-20	8-Mar-06	129.35
1 44-20	20-Mar-06	129.49
	19-Apr-06	129.59
	8-May-06	129.51
	7-Jun-06	129.83
	19-Jun-06	129.50
	11-Jul-06	129.31
	8-Aug-06	129.28
	18-Oct-05	123.53
	27-Oct-05	
	1-Nov-05	123.71
	29-Nov-05	124.13
	14-Dec-05	124.18
	12-Jan-06	124.06
	25-Jan-06	124.19
	23-Feb-06	124.32
ļ	8-Mar-06	124.85
TW-23	20-Mar-06	124.35
	19-Apr-06	124.53
	8-May-06	124.43
	7-Jun-06	124.91
	19-Jun-06	124.64
	11-Jul-06	124.76
	8-Aug-06	124.69
<u>.</u>		

Manitaring Wall	Sample Date	Donth to	
Monitoring Well	Sample Date	Depth-to- Groundwater	
		l	
· —	15 May 02	Feet TOC 126.65	
	15-May-03		
	23-Jun-03	126.56	
DW 4	02-Jul-03	127.10	
RW-1	11-Jul-03	5.68	
	08-Aug-03		
	26-Aug-03		
	1-Nov-05	no access	
	27-Oct-05		
	1-Nov-05	no access	
	29-Nov-05	127.25	
	14-Dec-05	127.26	
	5-Jan-06	127.00	
	12-Jan-06	127.08	
	25-Jan-06	127.29	
	23-Feb-06	127.39	
	8-Mar-06	127.42	
RW-2	20-Mar-06	127.50	
	19-Apr-06	127.61	
	8-May-06	127.54	
	7-Jun-06	127.81	
	19-Jun-06	127.56	
i	11-Jul-06	127.42	
	8-Aug-06	127.39	
			Cumulative BBIs
	10.0 1.05		Pumped from RW-3
	18-Oct-05		
	27-Oct-05	400.70	0000 7
}	1-Nov-05	126.72	2636.7
	29-Nov-05		7695.4
	14-Dec-05		9441.35
	5-Jan-06	_ 	13135.51 14342.68
	12-Jan-06 25-Jan-06	122.70	14342.08
		123.78	
RW-3	23-Feb-06	123.94	
KVV-3	8-Mar-06	124.33	
	20-Mar-06	124.01 124.16	
	19-Apr-06		
	8-May-06	124.05	47774 44
	7-Jun-06	124.58	17771.11
1	19-Jun-06	124.21	19258.54
	11-Jul-06	124.31	21550.77
J	8-Aug-06	124.26	24941.15
			<u></u>

Table 3
Summary of Chloride and Total Dissoved Solids Analytical Results
Buckeye Vacuum Field Unit
Lea County, NM

(MNWQC) Rem	ater Quality Control rediation Standards mg/L)	250	1,000
Monitoring Well ID	Sample Date	Chloride (mg/L) (EPA 300.0)	TDS (mg/L) (EPA 160.1)
	15-May-03	120	-
	18-Nov-03	442	892
	11-Feb04	420	972
	27-May-04	88.2	461
	6-Aug-04	49.0	385
TW-9	03-Mar-05	44.5	239
	9-May-05	53.7	378
1	27-Oct-05	89.9	431
	12-Jan-06	49.6	325
	5-Apr-06	46.7	321
	2-Oct-06	54.5	319
	15-May-03	44.3	
	19-Nov-03	59.1	369
	11-Feb04	52.9	372
Ī	28-May-04	39.9	344
	6-Aug-04	45.4	354
TW-10	03-Mar-05	33.0	226
	27-Oct-05	71.0	372
[5-Apr-06	87.4	406
-	3-Oct-06	66.6	375
	15-May-03	35.4	
	19-Nov-03	25.3	307
<u>.</u>	11-Feb04	83.8	610
	28-May-04	27.0	274
TW-11	5-Aug-04	30.1	269
144-11	03-Mar-05	28.4	174
	27-Oct-05	31.8	260
	5-Apr-06	34.8	269
-	3-Oct-06	35.1	265
	15-May-03	39.0	
. [18-Nov-03	64.3	560
	11-Feb04	83.8	610
[_	27-May-04	84.5	625
T\A/ 42	6-Aug-04	74.8	596
TW-13	03-Mar-05	90.0	502
İ	26-Oct-05	75.1	485
ĺ	6-Apr-06	60.3	429
	3-Oct-06	93.5	546

Notes:

TDS - Total dissolved solids mg/L - milligrams per liter

BOLD - Exceeds NMWQC Standards

Table 3
Summary of Chloride and Total Dissoved Solids Analytical Results
Buckeye Vacuum Field Unit
Lea County, NM

Monitoring Well ID	Sample Date	Chloride (mg/L) (EPA 300.0)	TDS (mg/L) (EPA 160.1)
	15-May-03	65.0	
	19-Nov-03	25.4	368
	11-Feb04	29.6	339
	28-May-04	30.3	346
	5-Aug-04	32.7	347
TW-14	03-Mar-05	87.9	340
	27-Oct-05	73.9	419
	5-Apr-06	71.1	421
-	3-Oct-06	69.6	424
	15-May-03	88.6	
_	19-Nov-03	561	1132
_	11-Feb04	419	908
	27-May-04	93.4	439
	5-Aug-04	102	545
TW-15	3-Mar-05	189	577
	9-May-05	184	711
	27-Oct-05	155	569
	12-Jan-06	144	486
	5-Apr-06	125	557
	2-Oct-06	119	503
	15-May-03	31.9	
	19-Nov-03	26.7	295
	11-Feb04	24.9	294
	28-May-04	26.7	302
TW-17	5-Aug-04	29.4	306
	03-Mar-05	178	565
Ĺ	26-Oct-05	59.9	362
	5-Apr-06	36.1	294
-	3-Oct-06	29.8	296
	15-May-03	35.4	
_	19-Nov-03	28.3	325
	11-Feb04	23.7	387
_	27-May-04	33.6	287
TW-19	5-Aug-04	42.8	344
-	03-Mar-05	54.2	224
_	27-Oct-05	39.0	293
-	6-Apr-06	40.5	308
_	2-Oct-06	33.2	290

Notes:

TDS - Total dissolved solids mg/L - milligrams per liter

BOLD - Exceeds NMWQC Standards

Table 3
Summary of Chloride and Total Dissoved Solids Analytical Results
Buckeye Vacuum Field Unit
Lea County, NM

Monitoring Well ID	Sample Date	Chloride (mg/L) (EPA 300.0)	TDS (mg/L) (EPA 160.1)
	15-May-03	35.4	
	18-Nov-03	26.5	328
	11-Feb04	25.2	353
,	27-May-04	27.1	316
TW-20	6-Aug-04	31.8	338
1 44-20	3-Mar-05	25.3	232
	26-Oct-05	53.7	351
	6-Apr-06	34.3	329
	3-Oct-06	39.4	310
·			
	15-May-03	1440	
	19-Nov-03	300	964
	11-Feb04	117	603
	27-May-04	617	1,710
	5-Aug-04	919	2,000
TW-23	3-Mar-05	656	1,680
	9-May-05	835	2,680
	27-Oct-05	284	1,460
	12-Jan-06	272	1,090
	6-Apr-06	35.2	1,070
ſ	2-Oct-06	253	1,070
	28-May-04	30.4	306
	6-Aug-04	34.6	354
	3-Mar-05	32.4	244
RW-2	27-Oct-05	264	600
	7-Apr-06	244	767
	3-Oct-06	49.8	325
Ĭ			
	15-May-03		
	27-May-04	338	854
	6-Aug-04	700	1,620
DW 2	3-Mar-05	873	1,710
RW-3	27-Oct-05	298	844
	7-Apr-06	791	1,700
	2-Oct-06	1,060	1,930
[

Notes:

TDS - Total dissolved solids

mg/L - milligrams per liter

BOLD - Exceeds NMWQC Standards

APPENDICIES

Laboratory Analytical Data January 14, 2006 Laboratory Analytical Data April 8, 2006 Laboratory Analytical Data October 5, 2006



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

SECOR International, Inc. 10235 West Little York Road Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 974425. Samples arrived at the laboratory on Saturday, January 14, 2006. The PO# for this group is UWPER-A5002-001 and the release number is BUCKEYE-SA.

Client Description	Lancaster Labs Number
TW-9 Grab Water Sample	4688739
TW-15 Grab Water Sample	4688740
TW-23 Grab Water Sample	4688741

ELECTRONIC COPY TO

SECOR International, Inc.

Attn: Ronnie Kallus



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Robert Heisey
Senior Specialist



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 *717-656-2300 Fax; 717-656-2681 * www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4688739

TW-9 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:01/12/2006 14:55

by RP

Account Number: 11842

Submitted: 01/14/2006 10:30

Reported: 01/26/2006 at 15:23

Discard: 02/26/2006

SECOR International, Inc. 10235 West Little York Road

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	325.	9.7	mg/l	1
00224	Chloride	16887-00-6	49.6	6.0	mg/1	20

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

1 2 D O 2 2 E O 2 3	, ''h~~~	~ ~ ~
Laboratory	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	01/18/2006 11:15	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	01/24/2006 16:08	William L Hamaker J	20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4688740

TW-15 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:01/12/2006 13:55

by RP

Account Number: 11842

Submitted: 01/14/2006 10:30

Reported: 01/26/2006 at 15:23

Discard: 02/26/2006

SECOR International, Inc. 10235 West Little York Road

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	486.	9.7	mg/1	1
00224	Chloride	16887-00-6	144.	15.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

- 1 .	~1			
Laboratory	t ('hrar	ו ו	~ 1	\triangle
Haboratory	CIII OI.		\sim \perp	. $\overline{}$

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	01/18/2006 11:15	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	01/25/2006 21:03	William L Hamaker J	r 50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 *717-656-2300 Fax:717-656-2681 * www.lancasterlabs.com

Page 1 of 1

4688741 Lancaster Laboratories Sample No. WW

TW-23 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 01/12/2006 16:05

Account Number: 11842

Submitted: 01/14/2006 10:30 Reported: 01/26/2006 at 15:23

SECOR International, Inc. 10235 West Little York Road

Discard: 02/26/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	1,090.	38.8	mg/1	1
00224	Chloride	16887-00-6	272.	30.0	mg/l	100

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			_	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	01/18/2006 11:15	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	01/25/2006 21:17	William L Hamaker Jr	100



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Quality Control Summary

Client Name: SECOR International, Inc.

Reported: 01/26/06 at 03:23 PM

Group Number: 974425

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank MDL	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 06018021201A Total Dissolved Solids	Sample nur N.D.	mber(s): 4 9.7		88741 99		80-120		
Batch number: 06024621101B Chloride	Sample nur N.D.	mber(s): 4 0.30	1688739-46 mg/l	88741 95		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS <u>%REC</u>	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	Conc	DUP RPD	Dup RPD <u>Max</u>
Batch number: 06018021201A Total Dissolved Solids	-	number 94	(s): 4688739 60-140		41 UNS	PK: P689763 285.	BKG: P689	763 5	5
Batch number: 06024621101B Chloride	Sample 112*	number	(s): 4688739 90-110	9-46887	41 UNS	PK: P690797 623.	BKG: P690	797 12*	3

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Environmental Analysis Request 1.8.4

A STATE OF

a die

Salahar .

- -

X.

Y ...

Lancaster Laboratories
Where quality is a science.

4688739-41 Acct # 119 Croup# 9447 Sample # 1

COC # 0108170

Diases print instructions on re-

6															- Control of the Cont		
ير	Client: SECOR		Acct. #:				4	10.44.2.34	(3)						For L	For Lab Use Only	nly
٥	Project Nome#: Buckey	Jacusm	# CIV/VIO) -			\	_	<u> </u>	_	<u></u>	SCR	SCR # 72	田
	oleca ivame/#: Pacific 1								\	\	_	\	_	\ \ \	/		. (- (
<u>a</u> ,	Project Manager: Roddie	Kallw	P.O.#:					*****	\	_	\	\	<u> </u>			,	9)
ΐ	Sampler: Rob Picrsod		Quote #:							_	_		\	<i>\</i>			
Ž	Name of state where samples were collected:	are collected:	<i>2 2 3 3 3 3 3 3 3 3 3 3</i>					v v de	000	\	<u> </u>	\	_	<u></u>			
								<u> </u>	ς <	_	\	\	<u> </u>	<u>'</u>			
(<u>v</u>))				0	\	\	<u> </u>	\	_			
					(00) (40)	16.2	0		<u> </u>	\			/	Remarks	ırks		
	Tw-9		112106	1455	×			X	×	-			·	٠			
1	T W-15		1/12/06	1355	×	_	×	×	×								
1	TW-23		111106	1605	×	_	ズ	×	X								
1							n and the										
1							+ .~										
1							**										
l							احوادها									·	
1																	
(C)	Turnaround Time Requested (TAT) (please circlet Normal Normal Street TAT is curied to I appealed about the surface of surfaces.	(TAT) (please circ	clet: Normal	Rush	Rel	Relinquished by:	ďb;	6	_	Date	<u> </u>	Time	Received by.	· Ving		Date	Time (9
	Date results are needed:			() b		1		1		7	0 8 2 7/	310	1		}	1/10/00	
. IK	Rush results requested by (please circle):	se circle): Phone	ine Fax	E-mail	<u>x</u>	Refinquished by	7.	,		Date			Received by:	by:		Date	Time
<u> </u>	Phone #: 713-937-7973	Fax#: 713-983-6328	-983-83	<i>\delta</i>		1	7 7	/	1		(/\#\w/	35	/				
/	E-mail address: r kall wo	Sc cor. com			<u>&</u>	Relinquished by:	d by:			Date		Time	Received by	<u>/</u>		Date	Time
	Data Package Options (please circle if required)	circle if required)	gs	SDG Complete?	٥												
	Type V	Type VI (Raw Data)	×	Yes No	Re	Relinquished by:	d by:		/	Date		Time R	Received by	id di		Date	Lime
,- ·	GLP	Site-specific QC required? Yes	equired? Ye	s No			2			-/		/				_	
	Other	(if yes, indicate QC sample and submit triplicate volume.)	nple and submit	triplicate volum	<u> </u>	Relinquished by:	d by:			Date	 /	Tirhe R	Received by	by:	1	Date	Time
	Type IV (CLP)	internal Chain of Custody required? Yes	Justody requ		<u> </u>							1	()	J		<u> </u>	1 Salas 1020



Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
າບ	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	Ī	liter(s)
m3	cubic meter(s)	ul	microliter(s)

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estIP ated value The Lesult Is ≥ the Method a etection Limit (Ma L) and < the Limit of Quantitation (Ll Q).
- ppm parts per million I ne ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight Basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported

on an as-received basis.

U.S. EPA CLP Data Qualifiers:

	Organic Qualifiers		Inorganic Qualifiers
Α	TIC is a possible aldol-condensation product	В	s alue is <cra but="" l,="" l<="" th="" ≥la=""></cra>
В	Analyte was also detected in the blank	E	Estimated due to interference
С	Pesticide result confirmed by d C/MS	M	a uplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
Ε	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and	W	Post digestion spike out of control limits
	confirmation columns >25%	*	a uplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995
X,Y,Z	a efined in case narrative		

Analytical test results for methods listed on the laboratories' aFFLedItatIRQsFRSe P eet all LeTuILeP eQts RI N(/ AC uQess otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. t e cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. TeE FI REd | INd EuPRESS t ARRANTV | S EuCLUSIS E ANA | IS d | IS EN IN LIEU | F ALL | TEER t ARRANTIES, EuPRESSEA | R IMPLIEA. t E a ISCLAIM ANV | TEER t ARRANTIES, EuPRESSEA | R IMPLIEA, INCLUAIND A t ARRANTV | F FITNESS FI R PARTICULAR PURPI SE ANA t ARRANTV | F MERCE ANTABILITV. IN NI ES ENT SE ALL LANCASTER LABI RATI RIES BE LIABLE FI R INA IRECT, SPECIAL, CI NSEQUENTIAL, | R INCIA ENTAL a AMADES INCLUAIND, BUT NI T LIMITEA TI , a AMADES FI R LI SS | F PRI FIT | R d | | at ILL RED ARA LESS | F (A) TEE NED LID ENCE (EITEER SI LE | R CI NCURRENT) | F LANCASTER LABI RATI RIES ANA (B) t e ETEER LANCASTER LABI RATI RIES e AS BEEN INFI RMEA | F TEE PI SSIBILITV | F SUCE a AMADES. t e accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

SECOR International, Inc. 10235 West Little York Road Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 984959. Samples arrived at the laboratory on Saturday, April 08, 2006. The PO# for this group is 89CH.49386.72 and the release number is BUCKEYE-SA.

Client Description	<u>Lancaster Labs Number</u>
TW-9 Grab Water Sample	4746854
TW-10 Grab Water Sample	4746855
TW-11 Grab Water Sample	4746856
TW-14 Grab Water Sample	4746857
TW-15 Grab Water Sample	4746858
TW-17 Grab Water Sample	4746859
TW-13 Grab Water Sample	4746860
TW-20 Grab Water Sample	4746861
TW-19 Grab Water Sample	4746862
TW-23 Grab Water Sample	4746863
RW-2 Grab Water Sample	4746864
RW-3 Grab Water Sample	4746865
DUP-1 Grab Water Sample	4746866

ELECTRONIC COPY TO

SECOR International, Inc.

Attn: Ronnie Kallus



2425 New Holland Pike, PQ Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2661 • www.lancasterlabs.com

Questions? Contact your Client Services Representative Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Robert Heisey Senior Specialist



2425 New Holland Pike, PO Box 12425, Lancaster PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746854

TW-9 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/05/2006 15:40

Account Number: 11842

Submitted: 04/08/2006 10:15

Reported: 04/27/2006 at 16:59

Discard: 05/28/2006

SECOR International, Inc. 10235 West Little York Road

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	321.	9.7	mg/1	1
00224	Chloride	16887-00-6	46.7	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 15:36	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746855

TW-10 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/05/2006 15:00

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59

SECOR International, Inc. 10235 West Little York Road

Discard: 05/28/2006

Houston TX 77040

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	406.	9.7	mg/l	1
00224	Chloride	16887-00-6	87.4	10.0	mg/1	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			_	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160 1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 16:25	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746856

TW-11 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/05/2006 12:17

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59 SECOR International, Inc. 10235 West Little York Road

Discard: 05/28/2006

Houston TX 77040

				As Received		ŧ
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	269.	9.7	mg/1	1
00224	Chloride	16887-00-6	34.8	2.0	mg/l	10

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT Analysis				Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	· 1	04/24/2006 21:50	Shannon L Phillips	10



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746857

TW-14 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/05/2006 14:20

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59

SECOR International, Inc. 10235 West Little York Road

Discard: 05/28/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	421.	9.7	mg/1	1
00224	Chloride	16887-00-6	71.1	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

- 1	~1		_
Laboratory	('hron	7 /	710
Habotatory		. ㅗ ៶	ニュビ

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 16:58	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746858

TW-15 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/05/2006 11:00

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15

SECOR International, Inc. 10235 West Little York Road

Reported: 04/27/2006 at 16:59

Houston TX 77040

Discard: 05/28/2006

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	557.	9.7	mg/l	1
00224	Chloride	16887-00-6	125.	10.0	mg/1	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
Nó.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1 .
00224	Chloride	EPA 300.0	1	04/21/2006 17:14	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746859

TW-17 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/05/2006 11:40

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15

SECOR International, Inc. 10235 West Little York Road

Reported: 04/27/2006 at 16:59

Discard: 05/28/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	294.	9.7	mg/l	1
00224	Chloride	16887-00-6	36.1	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			•	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 17:31	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746860

TW-13 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/06/2006 11:25

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59 SECOR International, Inc. 10235 West Little York Road

Discard: 05/28/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	429.	9.7	mg/l	1
00224	Chloride	16887-00-6	60.3	10.0	mg/1	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

- 1	~1			
Laboratory	('hran	٦.	~ 14	$^{\sim}$
Habutatut v			-	_

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 17:47	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746861

TW-20 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/06/2006 12:08

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59 SECOR International, Inc. 10235 West Little York Road Houston TX 77040

Discard: 05/28/2006

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	329.	9.7	mg/l	1
00224	Chloride	16887-00-6	34.3	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	. 1	04/21/2006 18:04	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746862

TW-19 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/06/2006 14:10

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59 SECOR International, Inc. 10235 West Little York Road

Discard: 05/28/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	308.	9.7	mg/1	1
00224	Chloride	16887-00-6	40.5	4.0	mg/l	20

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			_	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/25/2006 23:59	William L Hamaker Jr	20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746863

TW-23 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/06/2006 14:40

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15

Reported: 04/27/2006 at 16:59

Discard: 05/28/2006

SECOR International, Inc. 10235 West Little York Road Houston TX 77040

				As Received		
CAT	•		As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	1,070.	38.8	mg/l	1
00224	Chloride	16887-00-6	35.2	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 18:53	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746864

RW-2 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/07/2006 14:20

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59

SECOR International, Inc. 10235 West Little York Road Houston TX 77040

Discard: 05/28/2006

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	767.	19.4	mg/l	1
00224	Chloride	16887-00-6	244.	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/21/2006 19:09	William L Hamaker Jr	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746865

RW-3 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: 04/07/2006 12:40

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15 Reported: 04/27/2006 at 16:59 SECOR International, Inc. 10235 West Little York Road

Discard: 05/28/2006

Houston TX 77040

			•	As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	1,700.	77.6	mg/l	1
00224	Chloride	16887-00-6	791.	40.0	mg/l	200

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/27/2006 01:30	Shannon L Phillips	200



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4746866

DUP-1 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: n.a.

by WBD

Account Number: 11842

Submitted: 04/08/2006 10:15

Reported: 04/27/2006 at 16:59

Discard: 05/28/2006

SECOR International, Inc. 10235 West Little York Road Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	312.	9.7	mg/l	1
00224	Chloride	16887-00-6	37.6	4.0	mg/l	20

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT		202010001	0111	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	04/10/2006 12:33	Susan E Hibner	1
00224	Chloride	EPA 300.0	1	04/26/2006 00:31	William L Hamaker Jr	20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Quality Control Summary

Client Name: SECOR International, Inc.

Reported: 04/27/06 at 04:59 PM

Group Number: 984959

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 06100021202A Total Dissolved Solids	Sample nu N.D.	mber(s): 9.7	4746854-476 mg/l	46866 96		80-120		
Batch number: 06111621101A Chloride	Sample nu	mber(s): 0.20	4746856 mg/l	92		90-110		
Batch number: 06111621101B Chloride	Sample nu N.D.	mber(s): 0.20	4746854-47 mg/l	46855,474 92	16857-47468	861,4746863-47 90-110	746864	
Batch number: 06115621101B Chloride	Sample nu N.D.	mber(s): 0.20	4746862,47 mg/l	46865-474 98	16866	90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP <u>RPD</u>	Dup RPD Max
Batch number: 06100021202A Total Dissolved Solids	Sample 102	number	(s): 4746854 60-140			PK: P746402 1,260.	BKG: P74640 1,240.	2	5
Batch number: 06111621101A Chloride	Sample 97	number	(s): 4746856 90-110	UNSPK	: P7550	016 BKG: P75	55016 342.	4*	3
Batch number: 06111621101B	1.	number		-47468	55,4746	8857-4746861	1,4746863-47	46864 UNSPK	:
Chloride	158*	. Ditto.	90-110			46.7	45.2	3 (1)	3
Batch number: 06115621101B Chloride	Sample	number	(s): 4746862 90-110	,47468	65 - 4746	3866 UNSPK: 23.9	P751367 BKG 23.9	: P751367 0	3

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Lancaster

Acct. # 11842 Group# 484955 Sample # 4746854-66 COC # 0118255

Please print. Instructions on reverse side correspond with circled numbers.

		_						
Client: Secor		Acct. #:	$\mathbf{g} = \mathbf{Q}_{\mathbf{p}}$			For L	For Lab Use Only	
Project Name#: Buckeye Vacyum PWSID#:	eye Vacyum	PWSID #:				SCR	#	
Project Manager Rounie Kallus	Kallus	P.O.#:						9
Sampler: WBDE		Quote #:	2.0			<u>_</u>		
Name of state where samples were collected: Naw Maxico	s were collected: Neu	Mexico P				<u> </u>		
			e super			<u> </u>		
						/ Remarks		
1×-9	4-	4-5-6 1540 1	<u> </u>					
124-10		1500						
Tw-11		1217						
11-M		1420						
ナルーじ		001)						
[]-M-		1140	→ →					
TW-13	7	4-6-6 1125						
TW-20	7	4-6-6 1208						
TW-19	4-	4-6-6 1410						
TW-23	4.	4-6-6 1440	A A M A 1					
7) Turnaround Time Requested (TAT) (please circle):	ed (TAT) (please circle):	Normal Rush	Reijnguished by:		Time Rece	Received by:	Date	Time (9)
(Kush A Is subject to Lancaster Laboratories approval and surcharge.)	er Laboratories approval an	id surcharge.)	KW H	4-7-6 18	1830			
Rush results requested by (please circle):	lease circle): Phone	Fax E-mail	Relinquished by:	Date Ti	Time Recei	Received by:	Date	Time
Phone #:					<i>/</i>			
E-mail address:			Relinquished by:	Date Ti	Time Recei	Received by:	Date	Time
8 Data Package Options (please circle if required)	se circle if required)	SDG Complete?						-
	Type VI (Raw Data)	Yes No	Relinquished by:	Date Ti	Time Recei	Received by:	Date Tir	Time
	Site-specific QC required? Yes	ed? Yes No			/		_ _	-
Type II (Tier II) Other		ind submit triplicate volume.)	Relinquished by:	Date	Time Rece	Received by:	Date	Time
Type III (NJ Red. Del.)	Internal Chain of Custody required? Yes	ody required? Yes No			-			<u>_</u>
Type IV (CLP)					フ	1	<u>ج</u> الحرارة الم	一 つる

Analysis Request/ Environmental Services Chain of Cust

Lancaster

Acct # 1842 Group# 984959 Sample # 4746854-66 COC # 0118256

Please print. Instructions on reverse side correspond with circled numbers.

Client SECOR	Acct. #:		$\mathbf{e}_{\mathbf{c}}$			Fo	For Lab Use Only	<u>~</u>
Project Name #: Buckeye Vacuum PWSID#:	A PWSID#:					Sc	FSC: SCR #:	
Project Manager: Ronnie Kallus	P.O.#:		O.					9
Sampler: WBDE	Quote #:		-1-2-0-17am			<u>_</u>		
Name of state where samples were collected: New Mexico	lew Mexico		<u>(3</u>		 -	_		
		Journ 110 2001 May 2001 May	- 73 501		-) Bounding		
Ku1-2	0561 2-1-0	7	2 - 2			Velligins		
	124	7	7					
1-0-1	<u> </u>	7	7 7					
7 Turnaround Time Requested (TAT) (please circle): (Normal)	cfe): (Normal) Rush	Relinquished by:		Date Time	Received by:	ed by:	Date	Fime (9
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)	ral and surcharge.)		gme/	4-7-6183	a			
Rush results requested by (please circle): Phone	me Fax E-mail	Relinquished by:	•	Date Time	ne Received by:	ed by:	Date	Time
E-mail address:		Relinquished by:		Date Time	ne Received by:	ed by:	Date	Time
8 Data Package Options (please circle if required)	SDG Complete?	2:						
QC Summary Type VI (Raw Data)	Yes No	Relinquished by:	/	Date Time	ne Received by:	ed by:	Date	Time
GLP	equired? Yes No		/	/	<u> </u>	\		
Other	5	Relinquished by:		Date Tin	Time Received by:	ed by:	Date	Time
Type III (NJ Red. Del.) Internal Chain of C Type IV (CLP)	internal Chain of Custody required? Yes	0 Z			ال	J.	4 8 lace 1015	اهزير

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	I	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml

- < less thaQ The QuP beUlollowlQg the slgQls the <u>IIP It of TuaQttatloQ</u> the sP allest aP ouQt of aQalyte whIFh FaQ be reliably determined using this specific test.
- > greater than

ppm patts peUP IIIoQ – OQe ppP Is eTulvaleQt to oQe P IIIgtaP peUNlogtaP (Pg/Ng), oUoQe gtaP peUP IIIoQgtaPs. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weightbasis
o esults printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

X.Y.Z

Organic Qualifiers

a efined in case narrative

Inorganic Qualifiers

	•		-
Α	TIC is a possible aldol-condensation product	В	s alue is <coal, but="" th="" ≥ial<=""></coal,>
В	Analyte was also detected in the blank	Ε	b stimated due to interference
С	Pesticide result confirmed by GC/Mp	M	a uplicate injection precision not met
D	Compound quatitated on a diluted sample	N	ppike amount not within control limits
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MpA) used
	the instrument		for calculation
J	b stimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
Р	Concentration difference between primary and	*	a uplicate analysis not within control limits
	confirmation columns >05%	+	Correlation coefficient for MpA < 0.995
U	Compound was not detected		;

AQuiytlFal test lesults IoUP ethoQs listeGoQthe labolatolles' aFFleQtatloQsFope P eet all leTulleP eQts of N(/ AC uQess otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. t e cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WA55ANT< AND / ,M,TS OF / ,AB,/ ,T< — In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. Teb FI obGI ING buPobppt AooANTv Ip buCLUpIsb ANa Ip GIsbN IN LIbU | FALL | Tebot AooANTlbp, buPobppba | o IMPLIba. t b alpCLAIM ANv | Tebot AooANTlbp, buPobppba | o IMPLIba, INCLUa ING At AooANTv | FFITNbpp FI o PAOTICULAO PUOPI pb ANa t AooANTv | F MboCeANTABILITv. IN NI bsbNT peALL LANCApTbo LABI oATI olbp Bb LIABLb FI o INaIobCT, pPbCIAL, CI NpbQUbNTIAL, I o INClabNTAL a AMAGbp INCLUa ING, BUT NI T LIMITba TI , a AMAGbp FI o LI pp I F PoI FIT I o GI | at ILL obGAoaLbpp | F (A) Teb NbGLIGbNCb (bITebo pl Lb | o CI NCUoobNT) | F LANCApTbo LABI oATI olbp ANa (B) t ebTebo LANCApTbo LABI oATI olbp eAp BbbN INFI oMba | F Teb PI ppIBILITv | F pUCe a AMAGbp. t e accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the ptandard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

SECOR International, Inc. 10235 W. Little York Ste 400 Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1008565. Samples arrived at the laboratory on Thursday, October 05, 2006. The PO# for this group is 89CH.49386.72 and the release number is BUCKEYE-SA.

Client Description	<u>Lancaster Labs Number</u>
TW15 Grab Water Sample	4882390
TW19 Grab Water Sample	4882391
TW23 Grab Water Sample	4882392
RW3 Grab Water Sample	4882393
TW17 Grab Water Sample	4882394
TW11 Grab Water Sample	4882395
TW14 Grab Water Sample	4882396
TW10 Grab Water Sample	4882397
RW2 Grab Water Sample	4882398
TW9 Grab Water Sample	4882399
TW13 Grab Water Sample	4882400
TW20 Grab Water Sample	4882401
DUP1 Grab Water Sample	4882402

ELECTRONIC COPY TO

SECOR International, Inc.

Attn: Eric Page



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2390 Fax:717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Robert Neway
Robert Heisey
Senior Specialist



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882390

TW15 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/02/2006 15:35

by WDB

Account Number: 11842

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:23

SECOR International, Inc. 10235 W. Little York

Discard: 11/12/2006

Ste 400

Houston TX 77040

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	503.	9.7	mg/l	1
00224	Chloride	16887-00-6	119.	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

- 7		~1	
しっわへ	ratory	('hron	7010
наро	$\perp a \cup \cup \perp \vee$		TCTC

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/11/2006 02:00	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882391

TW19 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/02/2006 16:23

by WDB

Account Number: 11842

Submitted: 10/05/2006 09:25 Reported: 10/12/2006 at 16:24

Discard: 11/12/2006

SECOR International, Inc.

10235 W. Little York

Ste 400

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	290.	9.7	mg/1	1
00224	Chloride	16887-00-6	33.2	4.0	mg/1	20

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT		Labora	ory chro	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1 .
00224	Chloride	EPA 300.0	1	10/11/2006 02:15	Ashley M Heckman	20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882392

TW23 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/02/2006 17:10

by WDB

Account Number: 11842

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

Discard: 11/12/2006

SECOR International, Inc.

10235 W. Little York

Ste 400

Houston TX 77040

- CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
. 00212	Total Dissolved Solids	n.a.	1,070.	38.8	mg/l	1
00224	Chloride	16887-00-6	253.	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1 .
00224	Chloride	EPA 300.0	1	10/11/2006 03:02	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882393

RW3 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/02/2006 16:38

by WDB

Account Number: 11842

SECOR International, Inc.

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

10235 W. Little York Ste 400

Discard: 11/12/2006

Houston TX 77040

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	1,930.	77.6	mg/l	1
00224	Chloride	16887-00-6	1,060.	100.	mg/l	500

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			_	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 01:21	Ashley M Heckman	500



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882394

TW17 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 10:15

by WDB

Account Number: 11842

Submitted: 10/05/2006 09:25

SECOR International, Inc. 10235 W. Little York

Reported: 10/12/2006 at 16:24

Ste 400

Discard: 11/12/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	296.	9.7	mg/l	1
00224	Chloride	16887-00-6	29.8	4.0	mg/l	20

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			•	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/11/2006 03:17	Ashley M Heckman	20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882395

TW11 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 11:00

by WDB

Account Number: 11842

SECOR International, Inc.

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

10235 W. Little York Ste 400

Discard: 11/12/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	265.	9.7	mg/l	1
00224	Chloride	16887-00-6	35.1	4.0	mg/l	20

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			• ,	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/11/2006 03:32	Ashley M Heckman	20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882396

TW14 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 11:50

by WDB

Account Number: 11842

SECOR International, Inc.

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

10235 W. Little York Ste 400

Discard: 11/12/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	424.	9.7	mg/1	1
00224	Chloride	16887-00-6	69.6	5.0	mg/l	25

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

- 1 .	~-3	•	-
Laboratory	('hror	רר	c

CAT			4	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/06/2006 10:42	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/11/2006 03:48	Ashley M Heckman	25



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882397

TW10 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 12:40 b

by WDB

Account Number: 11842

SECOR International, Inc.

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

10235 W. Little York Ste 400

Discard: 11/12/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	375.	9.7	mg/l	1
00224	Chloride	16887-00-6	66.6	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

			1			
CAT			_		Dilution	
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/09/2006 09:58	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 12:27	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882398

RW2 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 15:05

Account Number: 11842

Submitted: 10/05/2006 09:25 Reported: 10/12/2006 at 16:24

SECOR International, Inc. 10235 W. Little York

Ac Peceirod

Ste 400

Discard: 11/12/2006

Houston TX 77040

CAT			As Received	Method		Dilution	
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor	
00212	Total Dissolved Solids	n.a.	325.	9.7	mg/l	1	
00224	Chloride	16887-00-6	49.8	10.0	mg/l	50	

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/09/2006 09:58	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 12:42	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882399

TW9 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 16:20

by WDB Account Number: 11842

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24 Discard: 11/12/2006

SECOR International, Inc. 10235 W. Little York

Ste 400

Houston TX 77040

				As Received				
CAT			As Received	Method	Dilution			
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor		
00212	Total Dissolved Solids	n.a.	319.	9.7	mg/l	1		
00224	Chloride	16887-00-6	54.5	10.0	mg/l	50		

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/09/2006 09:58	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 12:57	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882400

TW13 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 17:58

by WDB

Account Number: 11842

Submitted: 10/05/2006 09:25

SECOR International, Inc. 10235 W. Little York

Reported: 10/12/2006 at 16:24

Ste 400

Discard: 11/12/2006

Houston TX 77040

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	546.	9.7	mg/l	1
00224	Chloride	16887-00-6	93.5	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory	Chronicle
	Analysis

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/09/2006 09:58	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 13:13	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882401

TW20 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected:10/03/2006 17:10 by WDB

Account Number: 11842

SECOR International, Inc.

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

10235 W. Little York Ste 400

Discard: 11/12/2006

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	310.	9.7	mg/l	1
00224	Chloride	16887-00-6	39.4	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/09/2006 09:58	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 13:28	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4882402

DUP1 Grab Water Sample Buckeye Vacuum Semi-Annual GW Event

Collected: n.a.

by WDB

Account Number: 11842

Submitted: 10/05/2006 09:25

Reported: 10/12/2006 at 16:24

Discard: 11/12/2006

SECOR International, Inc. 10235 W. Little York

Ste 400

Houston TX 77040

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00212	Total Dissolved Solids	n.a.	1,060.	38.8	mg/l	1
00224	Chloride	16887-00-6	250.	10.0	mg/l	50

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT			2	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00212	Total Dissolved Solids	EPA 160.1	1	10/09/2006 09:58	Maria O Gittens	1
00224	Chloride	EPA 300.0	1	10/10/2006 13:43	Ashley M Heckman	50



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Quality Control Summary

Client Name: SECOR International, Inc.

Reported: 10/12/06 at 04:24 PM

Group Number: 1008565

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	<u>RPD</u>	RPD Max
Batch number: 06279021201A Total Dissolved Solids	Sample nur	mber(s): 9.7	4882390-488 mg/l	32396 90		80-120		
Batch number: 06282021201A Total Dissolved Solids	Sample num	mber(s): 9.7	4882397-488 mg/l	32402 99		80-120		
Batch number: 06282196102A Chloride	Sample nur N.D.	mber(s): 0.20	4882390-488 mg/l	32396 98		90-110		
Batch number: 06283196101A Chloride	Sample num	mber(s): 0.20	4882397-488 mg/l	32402 96		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS <u>%REC</u>	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG <u>Conc</u>	DUP Conc	DUP <u>RPD</u>	Dup RPD Max
Batch number: 06279021201A Total Dissolved Solids	Sample 101	number 105					BKG: P882091	l 1	5
Batch number: 06282021201A Total Dissolved Solids	Sample 108	number 117		'-48824' 3		PK: P883709 786.	BKG: P882926 763.	3	5
Batch number: 06282196102A Chloride	Sample 104	number	(s): 4882390 90-110	-48823	96 UNSE	PK: P882408 37.3	BKG: P882408	0	3
Batch number: 06283196101A Chloride	Sample 101	number	(s): 4882397 90-110	-48824	02 UNSF	PK: 4882402 250.	BKG: 4882402	0	3

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

Acct. # 11842 Group# 1008305 Sample # 4882390 402 COC # 0130657

Please print. Instructions on reverse side correspond with circled numbers.

FSC: SCR#: SSCO 3	Preservation Codes	T=Thiosulfate	O=Other	pibarg) Kups e i	ojenet ut. Vajgradki											Date Time (9)	Date Time		Date Time		Date Time		10/5/N/Mas
Ministry ses from the field FSC: Preservation Codes SCR#:		H=HCi	ha													2075 S		1046 07W	te Time Received by:	/	ite Time Received by:		ite Time Repeived by:
(5)		120	Selection of the control of the cont	A UO	SOLL Solution	7	7	2 	x 1 - 1	x 7 - 7	スプラナー	× /	メナーナーノ	7 - x		Relinquished by: Hand	Relinquished by	15W M	Relinquished by:		Relinquished by: Date		Relinquished by:
See	.) :	Powe	E C	Name of state where samples were collected: New MeXico	Boto Tine	>261 7401	162		1026 1638 1	10-3-6 1015 1	10-3-6 1100 1	1 0311 1-5-N	10-3-6 1240	10-341605	10-3-6 1620	ested (TAT) (please circle) Normal Rush caster Laboratories approval and surcharge.)	Phone Fax E-mail	S		s (please circle if required)	TX TRRP-13 Yes No MA MCP CT RCP	J) Site-specific QC (MS/MSD/Dup)? Yes No	(Il yes, indicate 0.0 sumple and automit inflicials volume.) Only) Internal COC Required? Yes / No
(1) Client Cheryrom	Prince Name # Buch	Project Manager:	Sampler: W	Name of state whe	2) September (About Manufacture)	Tw15	TW19	Twas	Rw3	TWIZ	「3」 ニ	TWIT I	12010	RWY	749	Turnaround Time	Date results are needed: Rush results requested b	Phone #: 713. 9	E-mail address:	8 Data Package Op	Type I (validation/NJ Reg) Type II (Tier II)	Type III (Reduced NJ)	Type IV (CLP SOW) Type VI (Raw Data Only)

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-8300 Fax: (717) 66-6766 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

And Wild Sequestion Construction of Constructi

Lancaster Laboratories

Please print. Instructions on reverse side correspond with circled numbers.

Time (9 ဖ Time Time Time me Date Date Date Date B=NaOH 0=Other Preservation Codes For Lab Use Only Remarks S=H,SO4 N=HNO3 E-HCI SCR#: Received by: Time | Received by: Time | Received by: Date | Time | Received by: 5) Amalyses Requested **Preservation Codes** Lime Time Date Date adudud paga -aga sing -aga ong ua aga ong ua X X X Relinquished by: Relinquished by: Refinquished by: Relinquisped by: Relinquished by: SDG Complete? Y ush g Project Name/#: Bucky Udc / 8946 - 493864 B 7.000 1 E-mail Name of state where samples were collected: New Mexico Site-specific QC (MS/MSD/Dup)? Yes (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Turnaround Time Requested (TAT) (please circle): (Normal Quote #: Internal COC Required? Yes / No. P.O.#: 10-3-b Fax Data Package Options (please circle if required) Rush results requested by (please circle): Phone #: 713 937 - 7973 Fax #: **TX TRRP-13** Client Cheyron Secon Date results are needed: Project Manager: Type I (validation/NJ Reg) Sampler: MADE Type VI (Raw Data Only) Type III (Reduced NJ) Type IV (CLP SOW) E-mail address: Type I! (Tier II)

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax. (717) 956-8766 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the cller

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D. TNTC IU umhos/cm	none detected Too Numerous To Count International Units micromhos/cm	BMQL MPN CP Units NTU	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units
C Cal	degrees Celsius (diet) calories millieguivalents	F lb. kg	degrees Fahrenheit pound(s) kilogram(s)
g ug ml m3	gram(s) microgram(s) milliliter(s) cubic meter(s)	mg l ul fib >5 um/ml	milligram(s) liter(s) microliter(s) fibers greater than 5 microns in length per ml

- < less thaQ The QuP beUlollowlQg the slgQ is the <u>IIP it of TuaQttatloQ</u> the sP allest aP ouQt of aQalyte which FaQ be reliably determined using this specific test.
- > greater than

ppm patts peUP WloQ – OQe ppP Is eTulvaleQt to oQe P WlglaP peUNloglaP (Pg/Ng), oUoQe glaP peUP WloQglaPs. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weightbasis
o esults printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

Inorganic Qualifiers

A B	TIC is a possible aldol-condensation product Analyte was also detected in the blank	B E	s alue is <coal, but="" ≥lal<br="">b stimated due to interference</coal,>
Č	Pesticide result confirmed by GC/Mp	М	a uplicate injection precision not met
Ď	Compound quatitated on a diluted sample	N	ppike amount not within control limits
E	Concentration exceeds the calibration range of	S	Method of standard additions (MpA) used
	the instrument		for calculation
J	b stimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
Р	Concentration difference between primary and	* .	a uplicate analysis not within control limits
	confirmation columns >05%	+	Correlation coefficient for MpA < 0.995
U	Compound was not detected		·
X,Y,Z	a efined in case narrative		

AQalytlFal test lesults IoUP ethoQs listeGoQthe labolatolles' aFFleQtatloQsFope P eet all leTulleP eQts of N(/ AC uQess otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. t e cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WA55ANT< AND / ,M,TS OF / ,AB,/ ,T< - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. Teb FI obGI ING buPobppt AooANTv Ip buCLUpIsb ANa Ip GIsbN IN LIbU I F ALL I Tebot AooANTlbp, buPobppba I o IMPLIba. t b alpCLAIM ANv I Tebot AooANTlbp, buPobppba I o IMPLIba, INCLUa ING At AooANTv I F FITNbpp FI o PAoTICULAO PUo PI pb ANa t AooANTv I F MboCeANTABILITv. IN NI bsbNT peALL LANCApTbo LABI oATI olbp Bb LIABLb FI o INa IobCT, pPbCIAL, CI NpbQUbNTIAL, I o INCIa bNTAL a AMAGbp INCLUa ING, BUT NI T LIMITba TI , a AMAGbp FI o LI pp I F PoI FITI o GI I at ILL obGAoa Lbpp I F (A) Teb NbGLIGbNCb (bITebo pI Lb I o CI NCUo obNT) I F LANCApTbo LABI oATI olbp ANa (B) t ebTebo LANCApTbo LABI oATI olbp eAp BbbN INFI oMba I F Teb PI ppIBILITv I F pUCe a AMAGbp. t e accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the ptandard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.