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# Flora Vista No. 1 2012 Quarterly Groundwater Monitoring Report

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Prepared for: ConocoPhillips Company  
Risk Management and Remediation

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

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## 1.0 INTRODUCTION

This report presents the results of the quarterly groundwater monitoring events conducted by Conestoga-Rovers & Associates (CRA) during 2012 at the Flora Vista No. 1 natural gas well site (Site), operated by Burlington Resources Oil & Gas Company LP (Burlington), a wholly-owned subsidiary of ConocoPhillips Company (ConocoPhillips) (**Figure 1**). The Site is located on private property in Unit Letter F, Section 22, Township 30N, Range 12W, of San Juan County, New Mexico. The Site consists of a gas well and associated equipment and installations. A detailed Site layout map is provided as **Figure 2**.

### 1.1 BACKGROUND

A previous operator removed an earthen dehydrator pit from service in March 1994. Hydrocarbon impacted soil was subsequently excavated in April 1994 and again in November 1995. A pit closure report was submitted to New Mexico Oil Conservation Division (NMOCD) in August 1996 by El Paso Field Services. NMOCD issued a letter to El Paso Field Services on January 24, 1997 approving pit closure and remediation.

Burlington encountered hydrocarbon-impacted soil at the Site during a production facility resetting activity in early 2003. Burlington subsequently directed the excavation of approximately 9,443 cubic yards of soil in an attempt to remove it. Groundwater was observed in the bottom of the excavation at approximately 25 feet below the ground surface. Field screening was conducted during excavation to determine extent of impacted soil. To enhance the remediation of the remaining amounts of residual hydrocarbon contamination in the excavated area, approximately 80 barrels (bbls) of a potassium permanganate oxidizer solution was sprayed on the soil.

In September 2003, Envirotech installed a groundwater monitor well (MW-1) slightly downgradient from the center of the excavation (**Figure 2**). Subsequent monitoring during September 2003 included analyses for benzene, toluene, ethylbenzene, and total xylenes (BTEX), as well as total petroleum hydrocarbons (TPH). Groundwater analyses indicated the presence of benzene and total xylenes above regulatory standards. Monitor Wells MW-2, MW-3, and MW-4 were installed at the Site in August 2008 in response to an April 2008 request from NMOCD for Site characterization and enhanced laboratory analyses.

A generalized geologic cross section was prepared using boring logs from the August 2008 monitor well installation and is presented as **Figure 3**.

During the March 2012 groundwater sampling event it was discovered that well vault and concrete pad of Monitor Well MW-2 had been destroyed by heavy machinery. The well completion was repaired on April 25, 2012. The top of casing elevations for all Site monitor wells were re-surveyed during the June 2012 quarterly sampling event.

The Flora Vista No. 1 Site history is summarized in **Table 1**.

## 2.0 **GROUNDWATER MONITORING SUMMARY, METHODOLOGY, AND ANALYTICAL RESULTS**

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### 2.1 **GROUNDWATER MONITORING SUMMARY**

During 2012 quarterly sampling events conducted on March 3, June 7, September 19, and December 13, groundwater elevation measurements were recorded in Monitor Wells MW-1, MW-2, MW-3, and MW-4 using an oil/water interface probe. Groundwater elevations are detailed in **Table 2**. Groundwater potentiometric surface maps created from 2012 data are presented as **Figures 4, 5, 6, and 7**. Based on the 2012 monitoring events data, groundwater flow is to the southwest and is consistent with historic monitoring event records for this Site.

### 2.2 **GROUNDWATER MONITORING METHODOLOGY**

During monitoring events, at least three well volumes were purged from Site Monitor Wells with a dedicated polyethylene 1.5-inch disposable bailer prior to sampling. If three well volumes could not be purged, wells were purged until dry and allowed to recharge prior to sampling. Purge water generated during purging of Site monitor wells was placed in the on-Site produced water tank (**Figure 2**). Groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped under chain-of-custody documentation to Pace Analytical Services, Inc. of Lenexa, KS. Samples were analyzed for the presence of BTEX by Environmental Protection Agency (EPA) Method 8260, and dissolved iron and dissolved manganese by EPA Method 6010. CRA groundwater sampling field forms are included as **Appendix A**.

Additionally, groundwater samples were collected from two downgradient domestic irrigation wells. Domestic irrigation well DW-1, located at 32 Road 3581, Flora Vista, NM, was sampled on July 27, 2012. Domestic irrigation well DW-2, located at 34 Road 3581, Flora Vista, NM was sampled on June 7, 2012. Groundwater samples collected from DW-1 and DW-2 were analyzed for the presence of BTEX by EPA Method 8260.

### 2.3 **GROUNDWATER MONITORING ANALYTICAL RESULTS**

Groundwater samples collected during 2012 quarterly sampling events from Monitor Wells MW-2 and MW-3 and domestic irrigation wells DW-1 and DW-2 did not exceed New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards for any target constituents. Groundwater collected from Monitor Wells MW-1 and MW-4 exceeded the NMWQCC standards for the following constituents:

#### **March 2012**



- **Benzene** – The NMWQCC standard for benzene is 0.010 milligrams per liter (mg/L). The concentration of benzene found in the groundwater sample collected from MW-1 was 1.590 mg/L. The groundwater sample collected from MW-4, the downgradient well, contained benzene at a concentration of 0.0264 mg/L.
- **Xylenes** – The NMWQCC standard for total xylenes is 0.620 mg/L. The concentration of xylenes found in groundwater sample collected from MW-1 was 5.040 mg/L.
- **Dissolved Iron** – The NMWQCC standard for dissolved iron is 1 mg/L. The concentration of dissolved iron found in groundwater samples collected from MW-1 and MW-4 was 25.30 mg/L and 2.46 mg/L, respectively.
- **Dissolved Manganese** – The NMWQCC standard for dissolved manganese is 0.2 mg/L. The concentration of dissolved manganese found in groundwater samples collected from MW-1 and MW-4 was 1.03 mg/L and 4.73 mg/L, respectively.

#### June 2012

- **Benzene** – The concentration of benzene found in groundwater samples collected from MW-1 and MW-4 was 1.77 mg/L and 0.044 mg/L, respectively.
- **Xylenes** – The concentration of xylenes found in the groundwater sample collected from MW-1 was 0.633 mg/L.
- **Dissolved Iron** – The concentration of dissolved iron found in groundwater samples collected from MW-1 and MW-4 was 21.40 mg/L and 2.07 mg/L, respectively.
- **Dissolved Manganese** – The concentration of dissolved manganese found in groundwater samples collected from MW-1 and MW-4 was 0.914 mg/L and 4.02 mg/L, respectively.

#### September 2012

- **Benzene** – The concentration of benzene found in the groundwater sample collected from MW-1 was 1.52 mg/L.
- **Xylenes** – The concentration of xylenes found in the groundwater sample collected from MW-1 was 2.49 mg/L.
- **Dissolved Iron** – The concentration of dissolved iron found in groundwater samples collected from MW-1 and MW-4 was 19.0 mg/L and 1.93 mg/L, respectively.

- **Dissolved Manganese** – The concentration of dissolved manganese found in groundwater samples collected from MW-1 and MW-4 was 0.86 mg/L and 4.5 mg/L, respectively.

#### December 2012

- **Benzene** – The concentration of benzene found in groundwater samples collected from MW-1 and MW-4 was 2.02 mg/L and 0.0941 mg/L, respectively.
- **Ethylbenzene** – The NMWQCC standard for ethylbenzene is 0.75 mg/L. The concentration of ethylbenzene in groundwater collected from MW-1 was 0.809 mg/L.
- **Xylenes** – The concentration of xylenes found in the groundwater sample collected from MW-1 was 5.02 mg/L.
- **Dissolved Iron** – The concentrations of dissolved iron found in groundwater samples collected from MW-1 and MW-4 was 23.8 mg/L and 2.92 mg/L, respectively.
- **Dissolved Manganese** – The concentration of dissolved manganese found in groundwater samples collected from MW-1 and MW-4 was 0.75 mg/L and 4.9 mg/L, respectively.

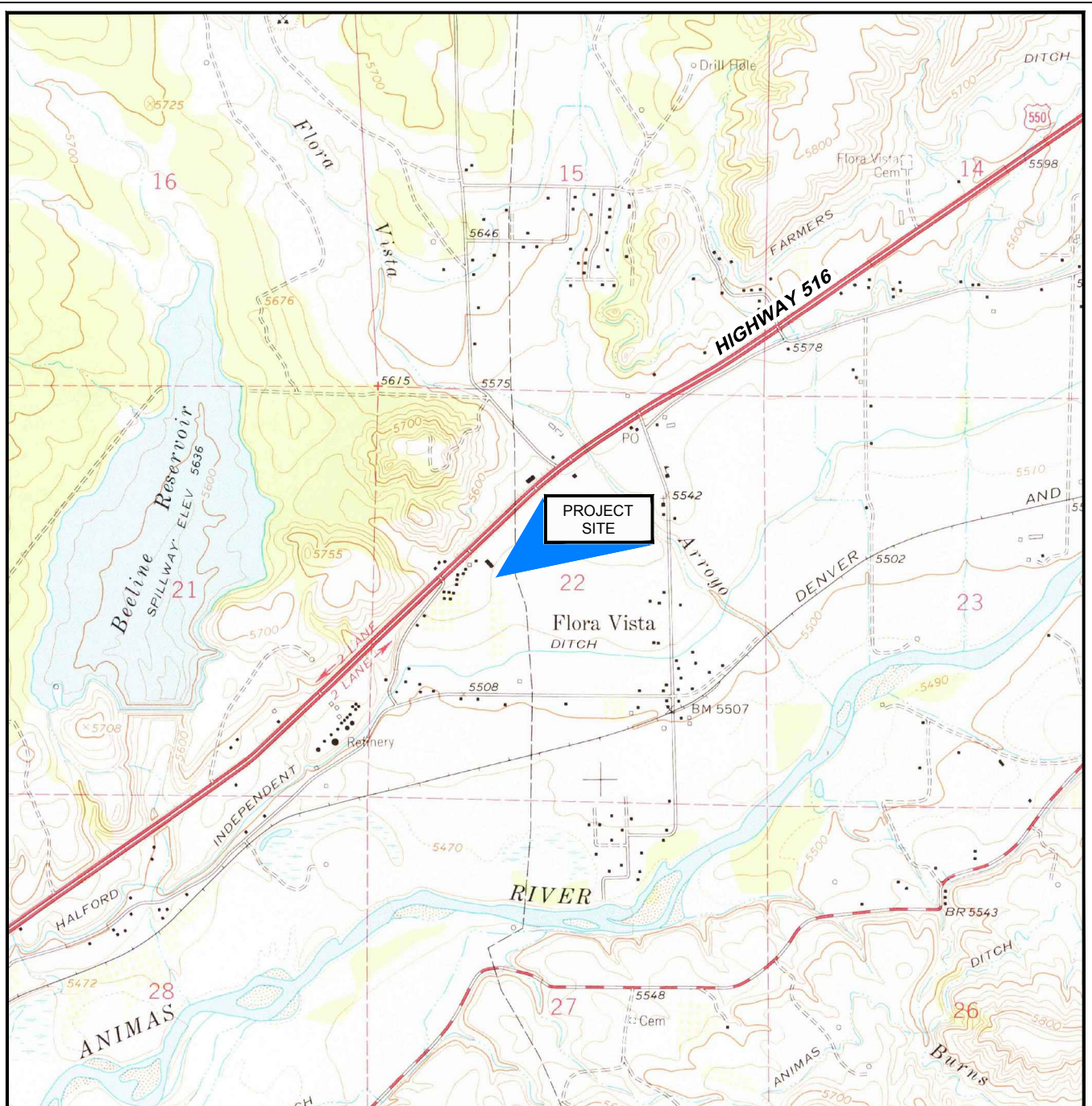
A summary of the historical groundwater laboratory analytical results is presented in **Table 3**. The 2012 laboratory analytical reports are included in **Appendix B**.

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater samples collected from MW-1 and MW-4 and have consistently exceeded NMWQCC groundwater quality standards for benzene, dissolved iron, and dissolved manganese from October 2008 through December 2012 and have intermittently exceeded the NMWQCC groundwater quality standard for dissolved iron. Groundwater samples from MW-1 have also historically exceeded the NMWQCC groundwater quality standard for xylenes and have intermittently exceeded the standard for ethylbenzene. BTEX constituent concentrations exhibit a decreasing trend over time in MW-1 and MW-4. Based on the historical groundwater quality data, groundwater samples collected from MW-2, MW-3, DW-1 and DW-2 have never exceeded NMWQCC groundwater quality standards for any target groundwater quality constituents.

CRA recommends the continuation of quarterly sampling of all Site monitor wells and periodic sampling of DW-1 and DW-2 in order to monitor ongoing natural attenuation at the Site. The next sampling event will take place in March 2013. CRA will collect samples for BTEX, dissolved iron, and dissolved manganese. The results of the monitoring for 2013 will be summarized in an annual report and submitted to the NMOCD during the first half of 2014.

## FIGURES



SOURCE: USGS 7.5 MINUTE QUADS  
"FLORA VISTA, NEW MEXICO"

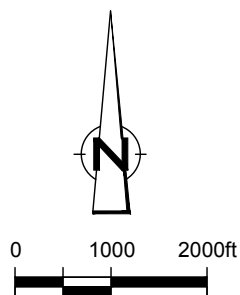
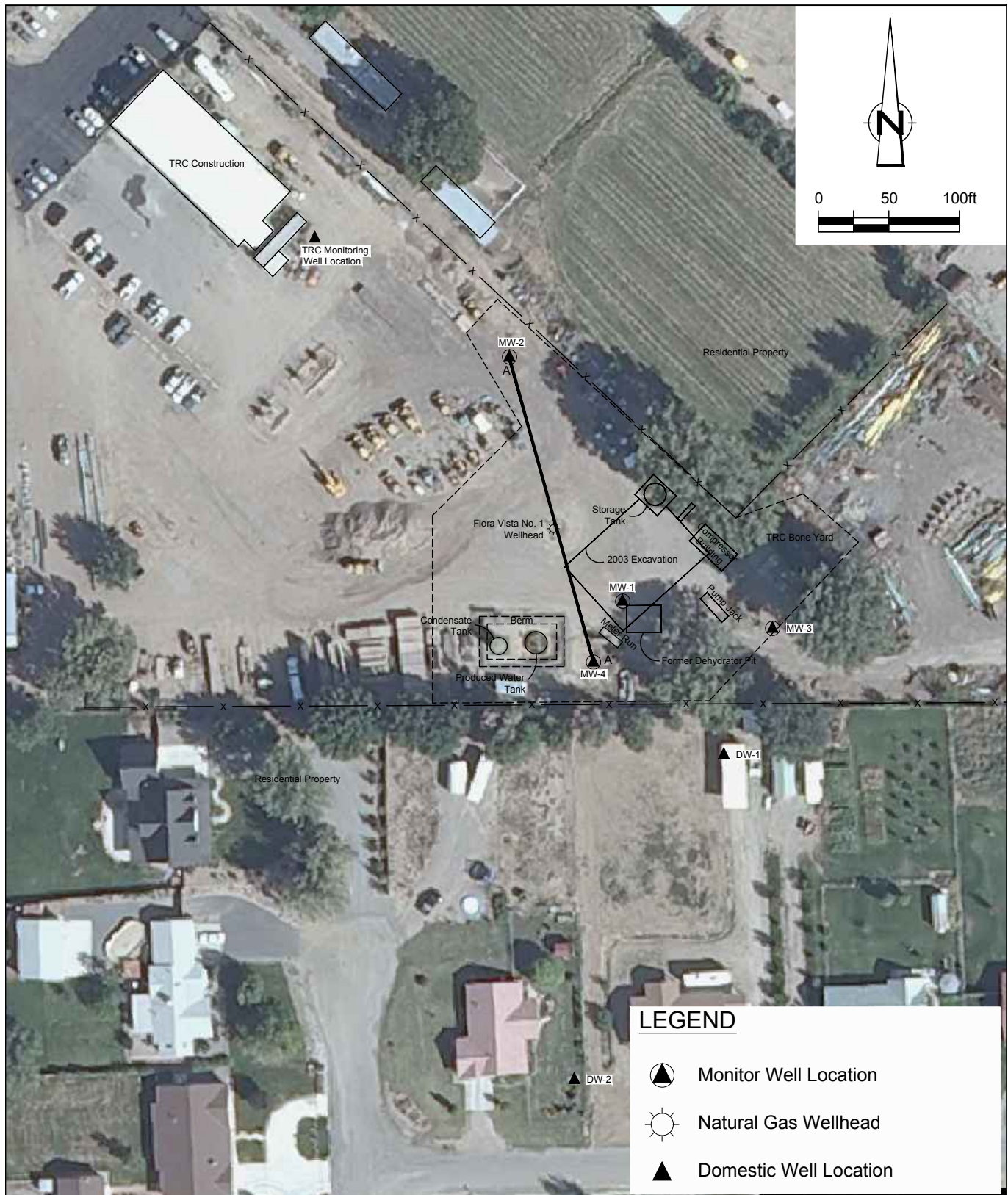


Figure 1

SITE VICINITY MAP  
FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*







ConocoPhillips high resolution aerial imagery 2008.

Figure 2

**SITE PLAN**  
**FLORA VISTA NO. 1 NATURAL GAS WELL SITE**  
**SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO**  
*ConocoPhillips Company*



Flora Vista No. 1 - Cross-Section A-A'

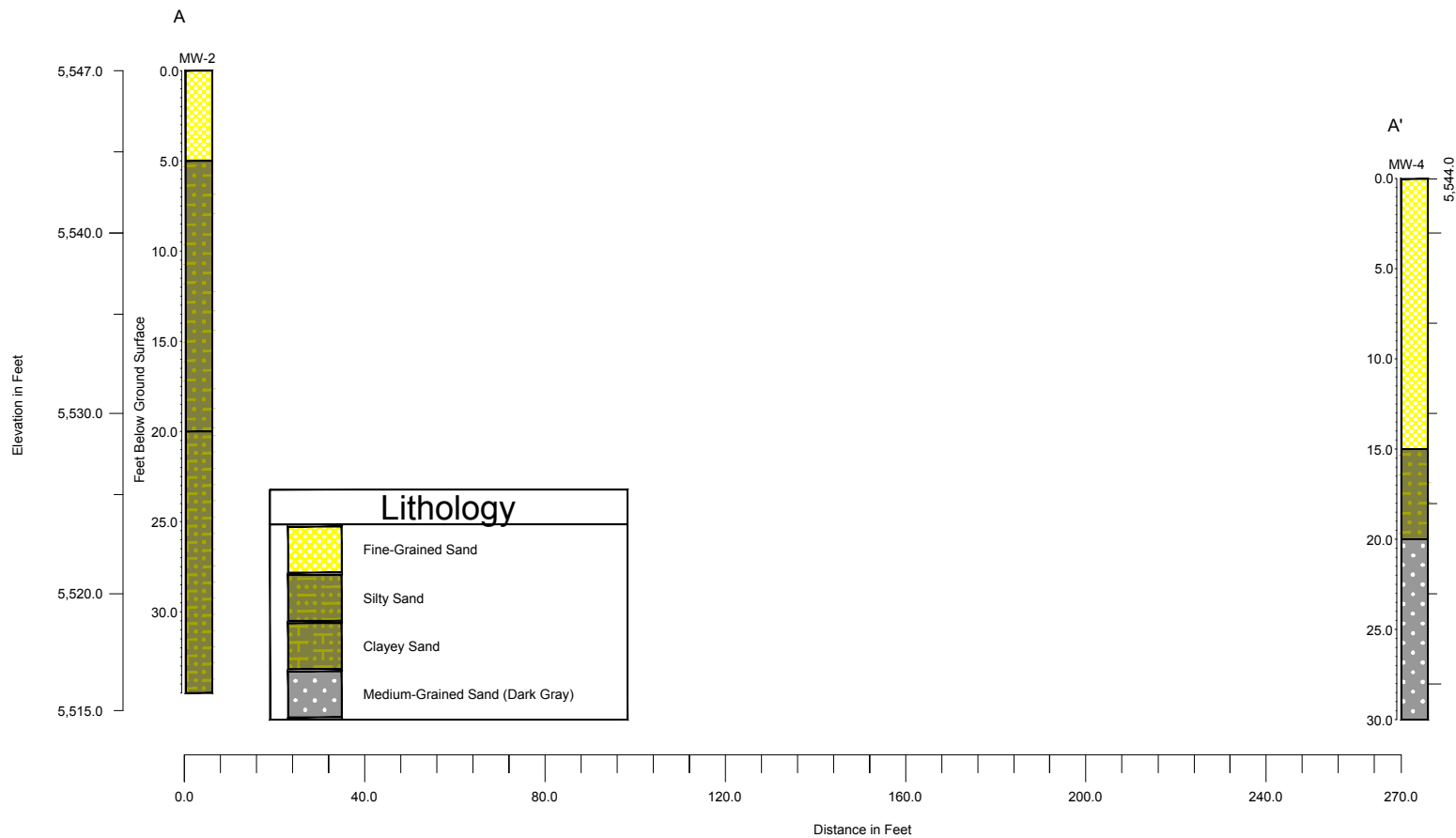


Figure 3

GEOLOGICAL CROSS SECTION  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





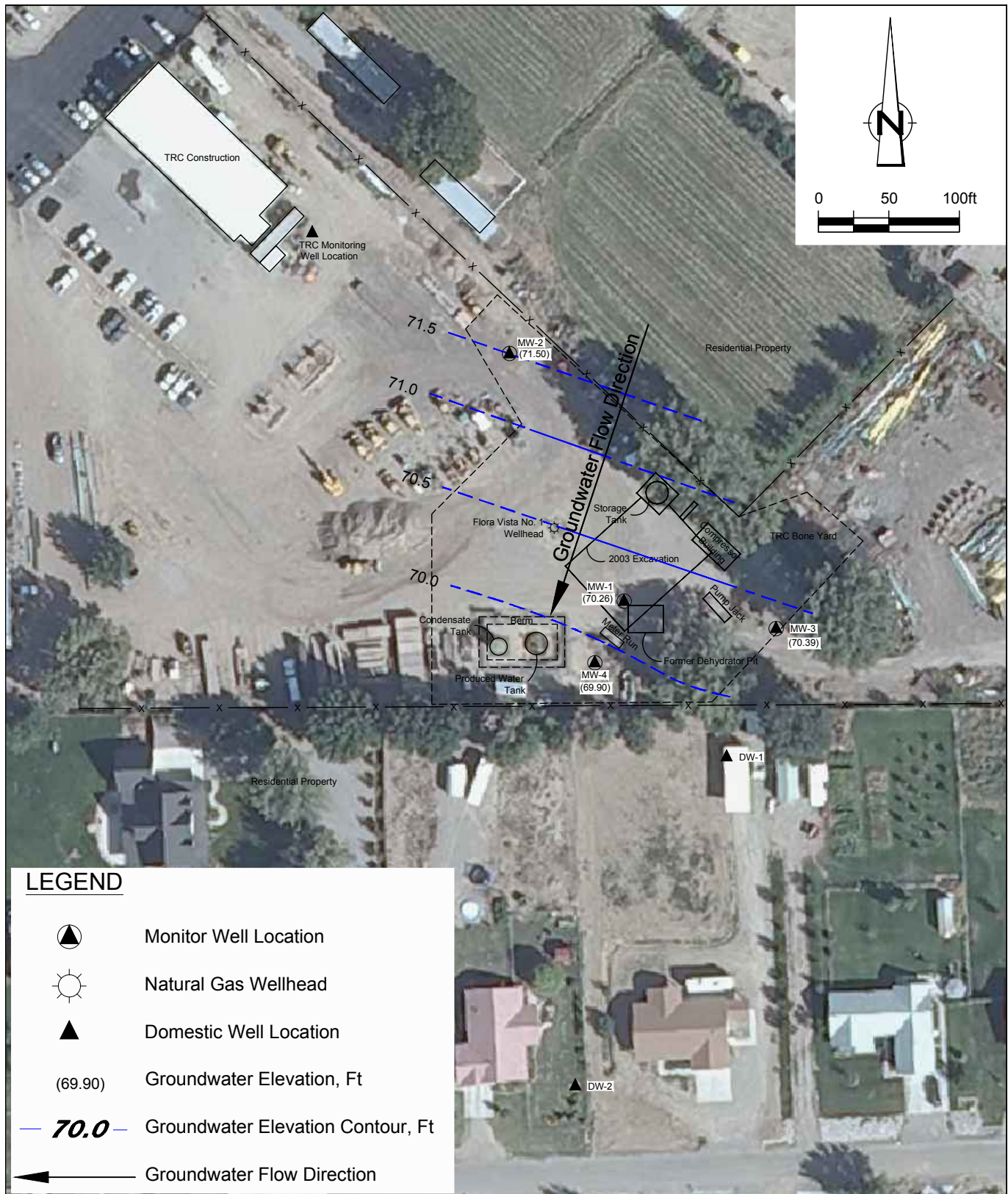


Figure 4

MARCH 2012 GROUNDWATER POTENTIOMETRIC SURFACE MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





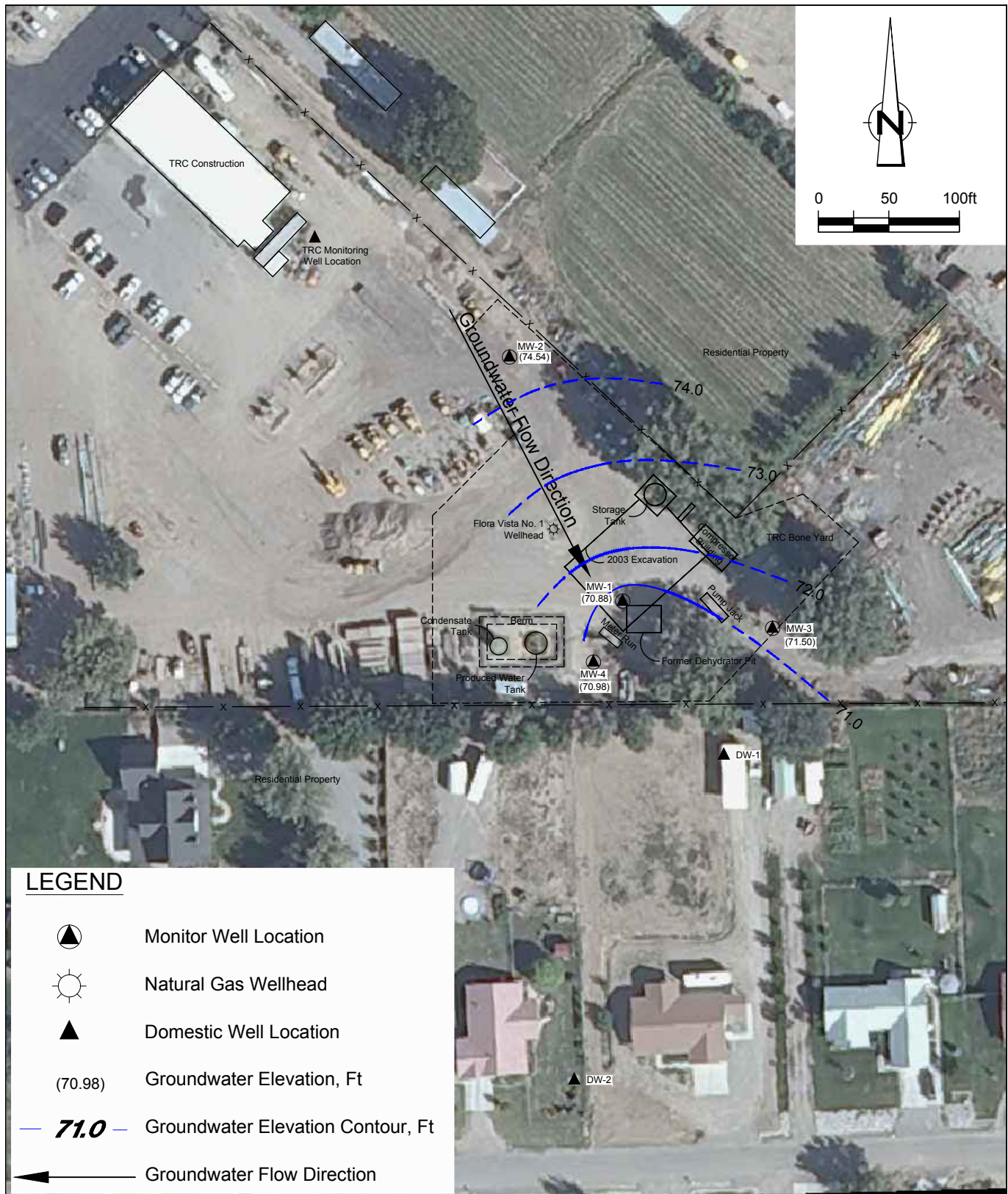


Figure 5

JUNE 2012 GROUNDWATER POTENTIOMETRIC SURFACE MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





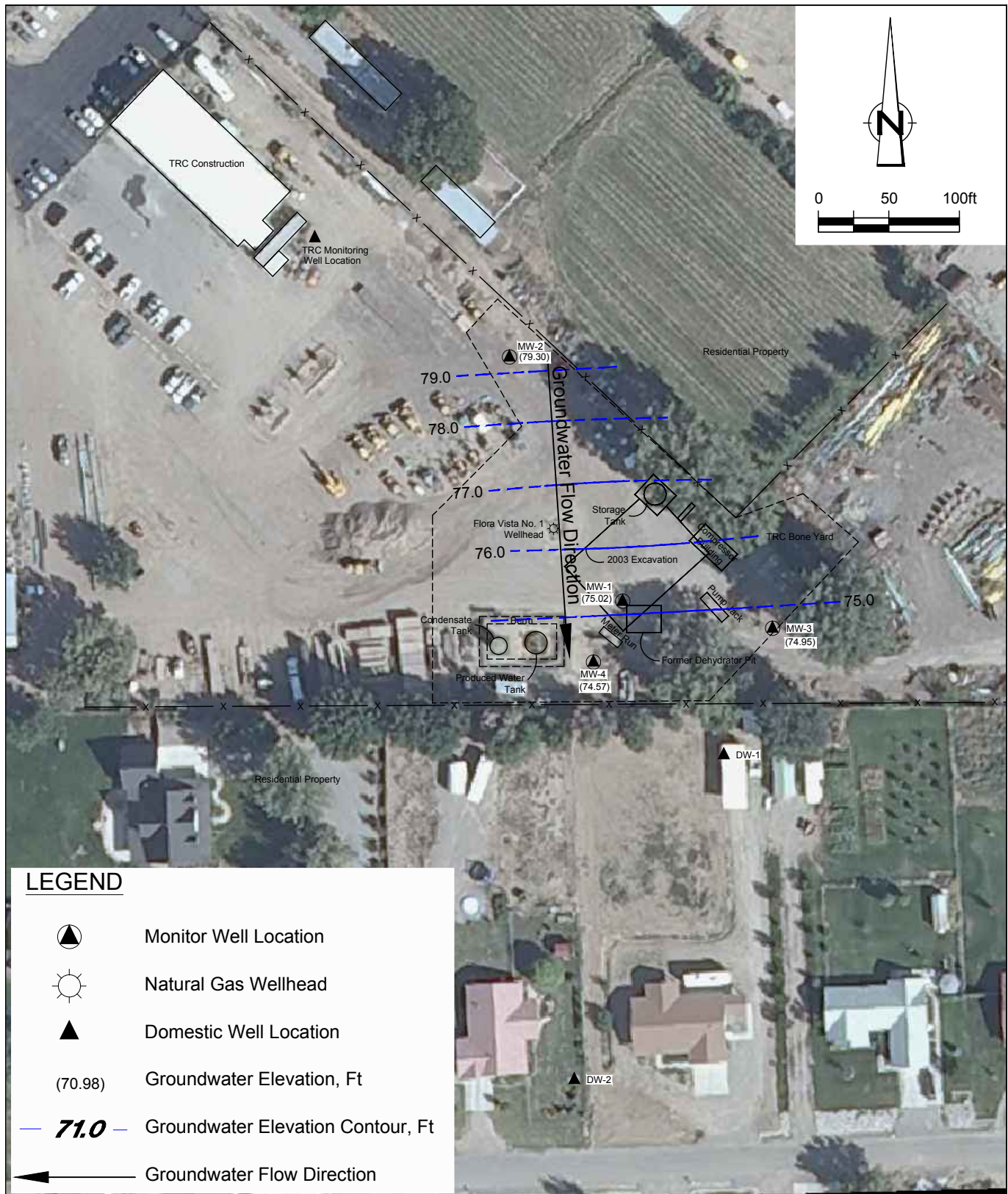


Figure 6

SEPTEMBER 2012 GROUNDWATER POTENTIOMETRIC SURFACE MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





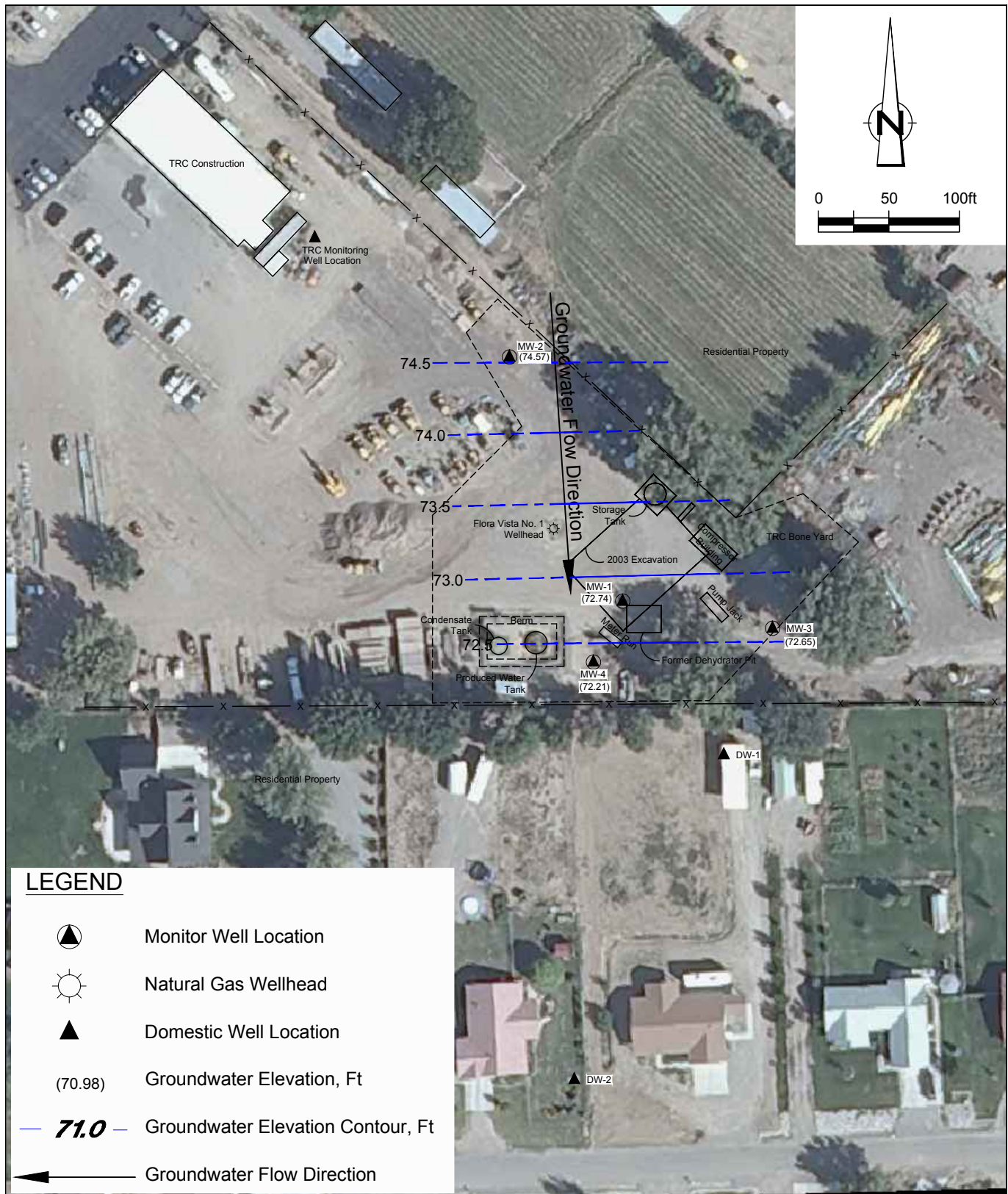


Figure 7

DECEMBER 2012 GROUNDWATER POTENTIOMETRIC SURFACE MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





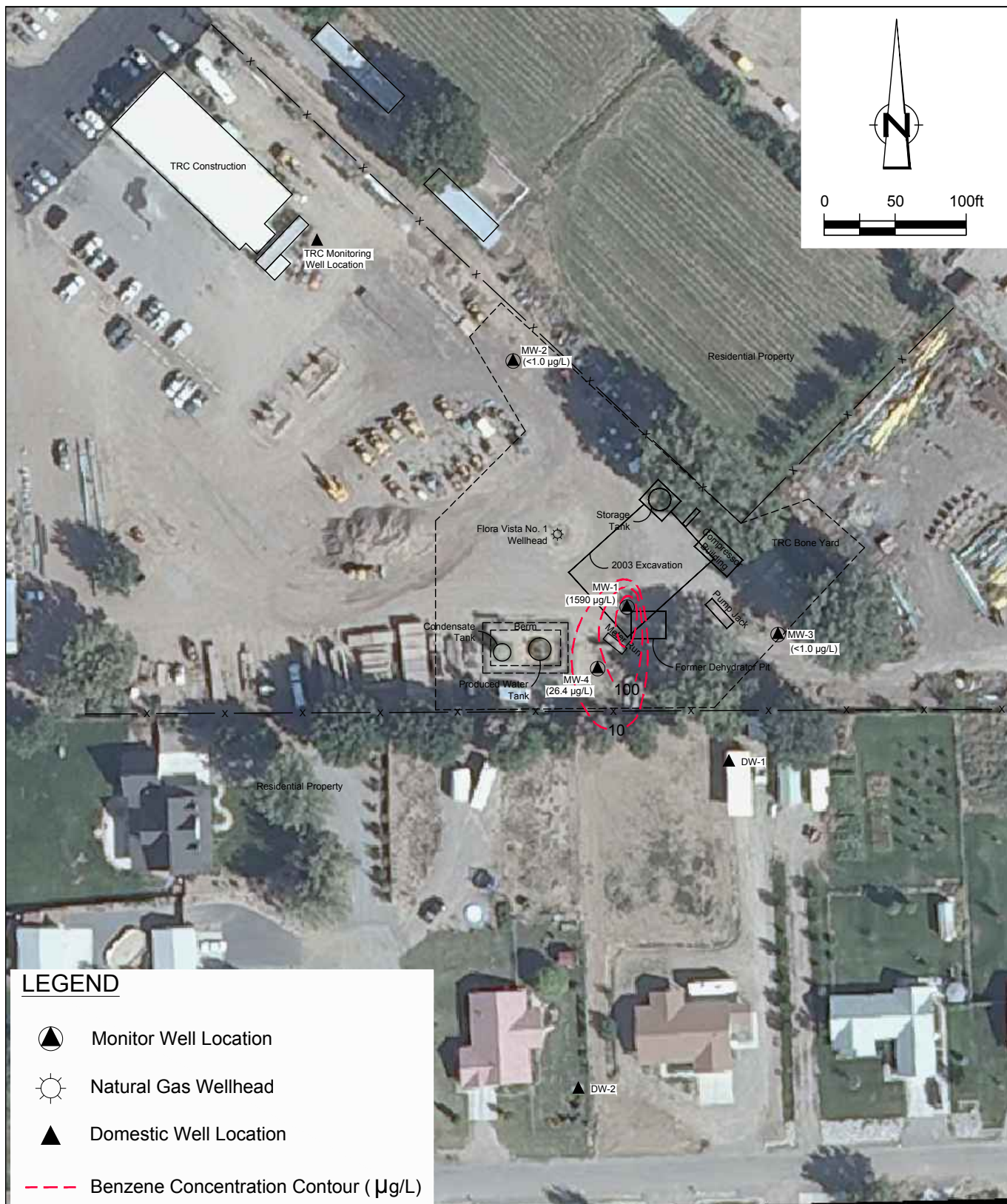


Figure 8

MARCH 2012 BENZENE CONCENTRATION MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





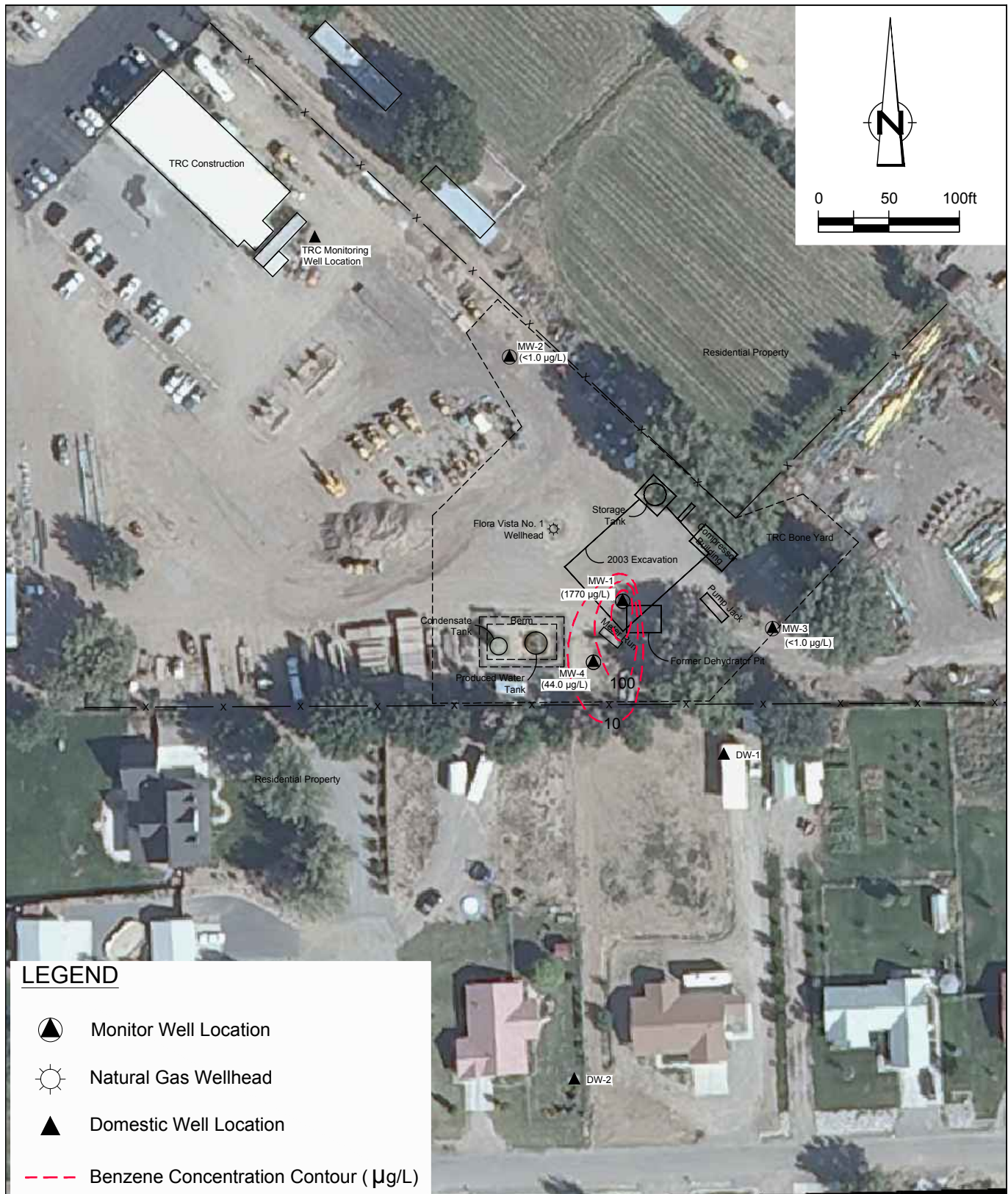


Figure 9

JUNE 2012 BENZENE CONCENTRATION MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





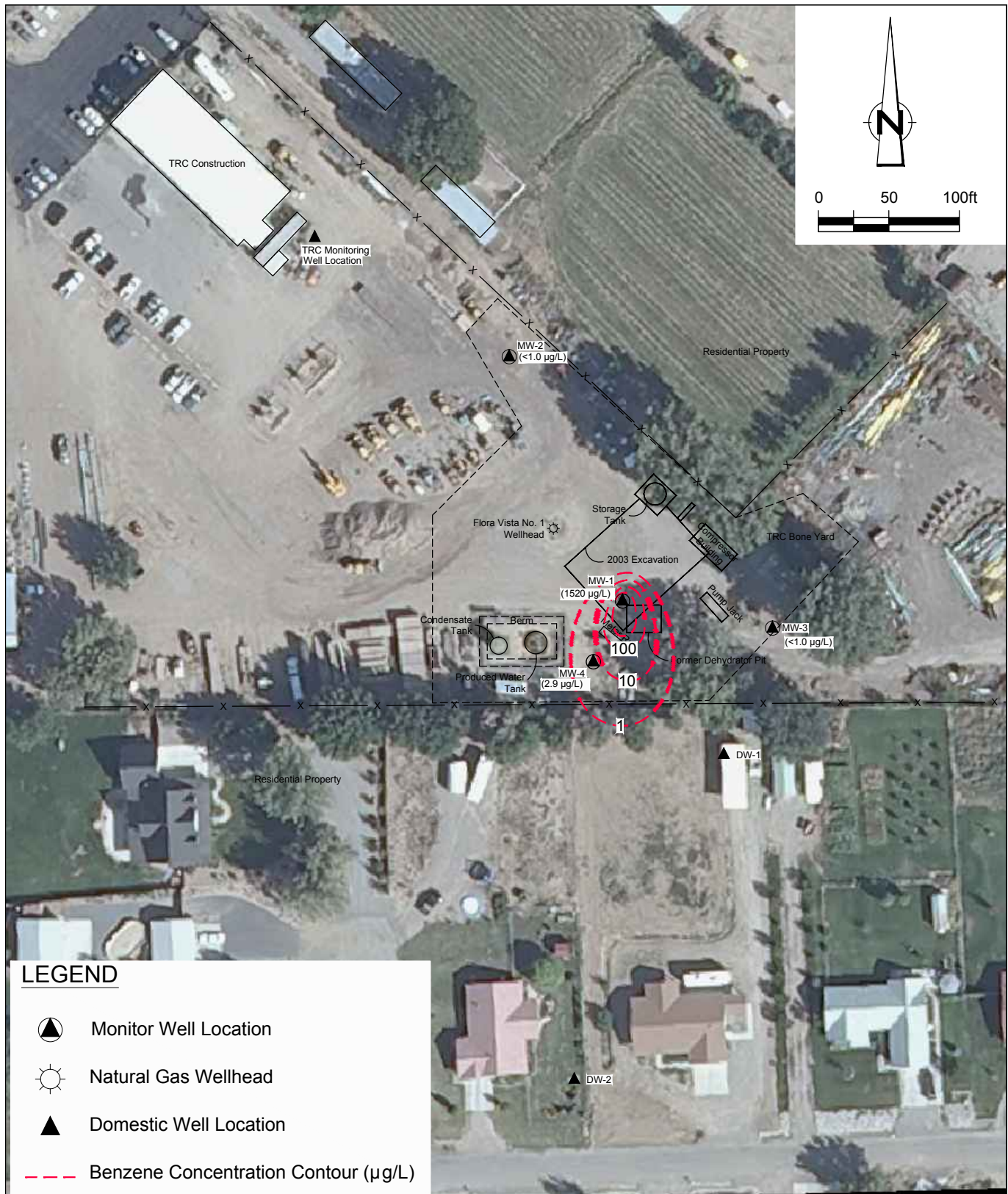


Figure 10

SEPTEMBER 2012 BENZENE CONCENTRATION MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*





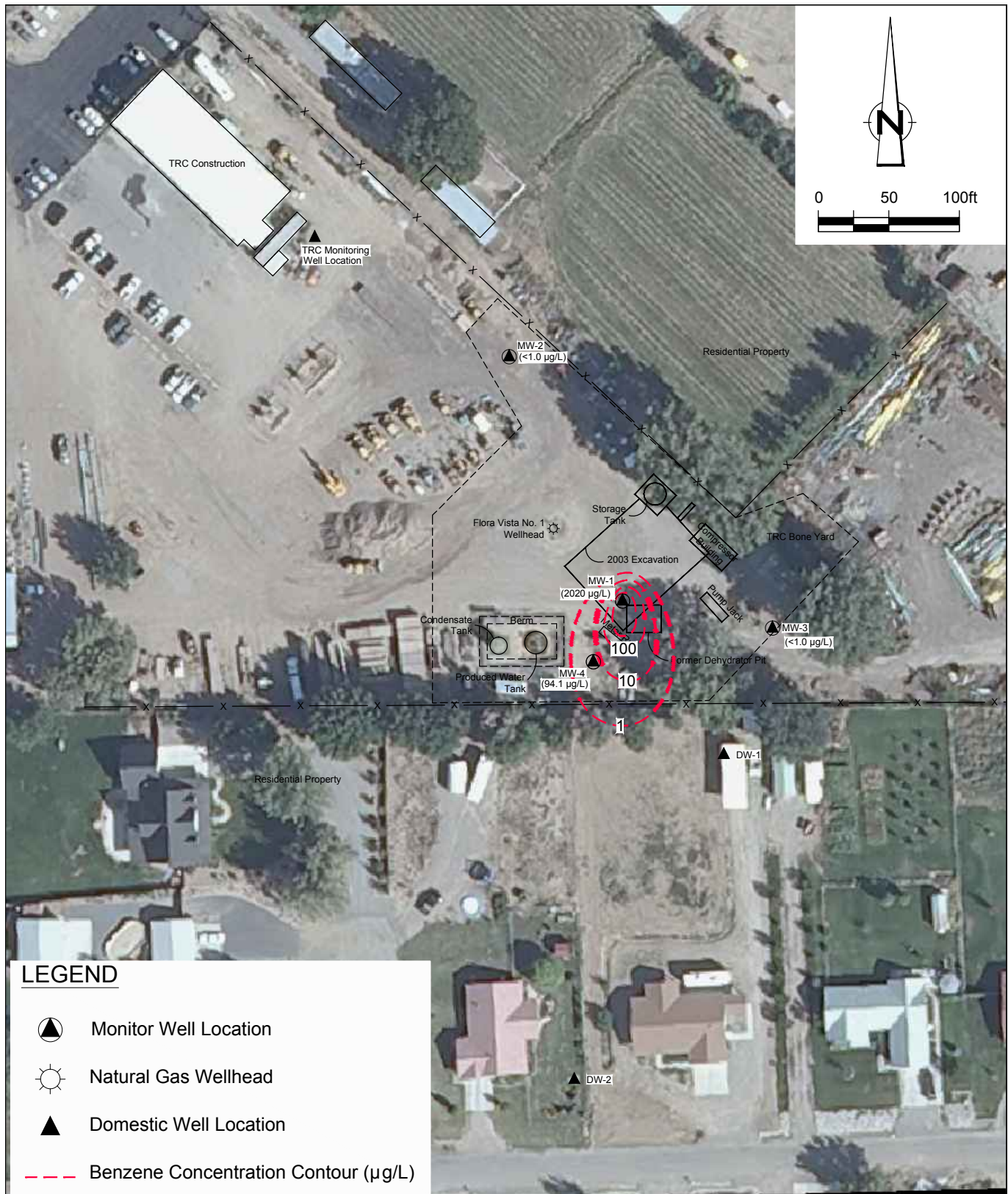


Figure 11

DECEMBER 2012 BENZENE CONCENTRATION MAP  
 FLORA VISTA NO. 1 NATURAL GAS WELL SITE  
 SECTION 22, T30N-R12W, SAN JUAN COUNTY, NEW MEXICO  
*ConocoPhillips Company*



## TABLES



TABLE 1

**SITE HISTORY TIMELINE  
CONOCOPHILLIPS COMPANY  
FLORA VISTA NO. 1  
SAN JUAN COUNTY, NM**

<i>Date/Time Period</i>	<i>Event/Action</i>	<i>Description/Comments</i>
November 28, 1995	Pit Closure Activities	Philip Environmental excavated and removed approximately 850 cubic yards of soil from the area where the Flora Vista No. 1 dehydrator pit was located. Excavation activities were stopped in the north and west directions due to the positions of the compressor and meter run equipment.
July and August 1996	Submittal of Pit Closure	El Paso Field Services submits Pit Closure Reports to the New Mexico Oil Conservation Division outlining the excavation and closure of the dehydrator pit at the site.
January 24, 1997	Pit Closure Approval	El Paso Field Services receives approval of pit closure from the New Mexico Oil Conservation Division.
June and July 2003	Initial Site Assessment	Historical petroleum contaminated soil discovered during a production facility resetting activity. Environmental investigation began with the excavation of approximately 4,986 cubic yards of impacted soil and 4,446 cubic yards of clean soil. Groundwater was encountered at approximately 25 feet below the ground surface. The impacted soil was taken to a commercial landfill facility located on Crouch Mesa in Farmington, New Mexico. Approximately 80 bbls of potassium permanganate was sprayed on the soils to breakdown any minor amounts of residual petroleum contaminants. The excavation area was backfilled with clean soil.
September 2, 2003	Groundwater Monitor Well Installation	One ground water Monitor Well, MW-1, was installed slightly down-gradient from the center of the soil excavation by Envirotech. Total depth of well is 26 feet.
September of 2003 through December 13, 2006	Quarterly Groundwater Monitoring	Quarterly groundwater monitoring of MW-1 for analysis of BTEX constituents. MW-1 remained above standards for benzene, ethylbenzene, and total xylenes.
March 31, 2006	Site Transfer	ConocoPhillips Company completes acquisition of Burlington Resources.
March 2007 through January 2008	Consultant Change and Groundwater Monitoring	After the acquisition of Burlington Resources by ConocoPhillips, consulting responsibilities were transferred from Lode Star LLC of Farmington, NM to Tetra Tech of Albuquerque, NM. Tetra Tech began sampling the Flora Vista site quarterly in March of 2007. Four consecutive quarters of groundwater sampling were conducted at the Flora Vista site. Groundwater was sampled from MW-1 and was analyzed for BTEX constituents during all sampling events. MW-1 remained above standards for benzene, ethylbenzene, and total xylenes.
March 28, 2008	Reporting	Annual report for 2007 is submitted to the Oil Conservation Division of NM Energy, Minerals, and Resources Department (OCD).
April 1, 2008	Additional Monitoring Requested by OCD	Oil Conservation Division of NM Energy, Minerals, and Resources Dept. indicates additional investigation and sampling is necessary for closure consideration during a meeting with Glenn Von Gonten.
July 23, 2008	Groundwater Monitoring	Groundwater monitoring of MW-1. One sample and a duplicate were collected. Benzene and Xylenes are above NMWQCC standards.
August 12 and 13, 2008	Groundwater Monitor Well Installation and Groundwater Monitoring	Three additional groundwater Monitor Wells, MW-2, MW-3 and MW-4 were installed by WDC and overseen by Tetra Tech. MW-2 was installed upgradient of MW-1. Both MW-3 and MW-4 were installed downgradient of MW-1. Soil samples were collected from just above the groundwater interface for each boring location and sent to Southern Petroleum Laboratory for a baseline soil analysis. All wells were developed by purging approximately 80 gallons of fluid using a surge block and hand bailer/purge pump.

TABLE 1

**SITE HISTORY TIMELINE  
CONOCOPHILLIPS COMPANY  
FLORA VISTA NO. 1  
SAN JUAN COUNTY, NM**

<i>Date/Time Period</i>	<i>Event/Action</i>	<i>Description/Comments</i>
October 21, 2008	Groundwater Monitoring	Third quarter 2008 groundwater monitoring was completed and was the first quarter of sampling to include all four monitor wells on site. A baseline suite was completed including major ions, total metals, semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs) including BTEX, diesel range organics, and gasoline range organics. There were 3 constituents that returned results above NMWQCC limits, Benzene (MW-1 and MW-4), Total Xylenes (MW-1), and Sulfate (MW-1).
January 28, 2009	Groundwater Monitoring	Tetra Tech conducted fourth quarter 2008 groundwater monitoring at the site for BTEX constituents in all four monitor wells. Benzene (MW-1 and MW-4), Ethylbenzene (MW-1) and Xylenes (MW-1) were above NMWQCC standards.
March 1, 2009	Initiate Annual Sampling	The Flora Vista No. 1 site is put on an annual monitoring schedule. The next sampling event was scheduled for September 2009.
September 30, 2009	Groundwater Monitoring	Tetra Tech conducted 2009 annual groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1) and manganese (MW-1 and MW-4) were above NMWQCC standards.
December 16, 2009	Private Irrigation Well Sampling	Tetra Tech collected a groundwater sample from a domestic well (DW-1) located to the south of the site to be analyzed for BTEX. All constituents were found to be below laboratory detection limits and NMWQCC standards.
May 14, 2010	Initiate Quarterly Sampling	The Flora Vista No. 1 site is put on a semi-annual monitoring schedule. Private domestic irrigation well sampling is also to be included in semi-annual sampling events.
June 10, 2010	Private Irrigation Well Sampling	Tetra Tech collected a groundwater sample from a second private down-gradient domestic well (DW-2) to be sampled for BTEX. All constituents were found to be below laboratory detection limits and NMWQCC standards.
June 10 and 11, 2010	Groundwater Monitoring	Tetra Tech conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1) and manganese (MW-1 and MW-4) were above NMWQCC standards.
September 27, 2010	Groundwater Monitoring	Tetra Tech conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron and manganese (MW-1 and MW-4) were above NMWQCC standards.
December 14, 2010	Groundwater Monitoring	Tetra Tech conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron and manganese (MW-1 and MW-4) were above NMWQCC standards.
March 17, 2011	Groundwater Monitoring	Tetra Tech conducted groundwater monitoring at the site for BTEX constituents, dissolved iron, dissolved manganese, and sulfate. Groundwater collected from MW-1 exceeded the NMWQCC standards for benzene, xylenes, dissolved iron and dissolved manganese. Groundwater collected from MW-4 exceeded the NMWQCC standards from benzene and dissolved manganese. Tetra Tech also collected a groundwater sample from a domestic well (DW-2) located to the south of the site to be analyzed for BTEX. All constituents were found to be below laboratory detection limits and NMWQCC standards in the domestic well sample.
June 15, 2011	Transfer of Site Consulting Responsibilities	On June 15, 2011, Site consulting responsibilities were transferred from Tetra Tech of Albuquerque, NM to Conestoga-Rovers & Associates (CRA) of Albuquerque, NM.

TABLE 1

**SITE HISTORY TIMELINE  
CONOCOPHILLIPS COMPANY  
FLORA VISTA NO. 1  
SAN JUAN COUNTY, NM**

<i>Date/Time Period</i>	<i>Event/Action</i>	<i>Description/Comments</i>
June 24, 2011	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards. CRA also collected a groundwater sample from Domestic Well DW-1 located south of the site to be analyzed for BTEX. All constituents were found to be below laboratory detection limits and NMWQCC standards in the domestic well sample.
September 29, 2011	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards.
December 14, 2011	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards.
March 9, 2012	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards. The well vault of MW-2 is found to be destroyed.
April 25, 2012	Well Pad Repair	CRA on site to oversee repair of MW-2.
June 7, 2012	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1 and MW-4), xylenes (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards. CRA also collected a groundwater sample from Domestic Well DW-2 located south of the site to be analyzed for BTEX. All constituents were found to be below laboratory detection limits and NMWQCC standards in the domestic well sample.
July 27, 2012	Private Irrigation Well Sampling	CRA collected a groundwater sample from Domestic Well DW-1 located south of the site to be analyzed for BTEX. All constituents were found to be below laboratory detection limits and NMWQCC standards in the domestic well sample.
September 19, 2012	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1), xylenes (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards.
December 13, 2012	Groundwater Monitoring	CRA conducted groundwater monitoring at the site for BTEX constituents, dissolved iron and manganese, and sulfate. Benzene (MW-1), xylenes (MW-1), ethylbenzene (MW-1), dissolved iron (MW-1 and MW-4) and dissolved manganese (MW-1 and MW-4) were above NMWQCC standards.

TABLE 2

**MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATIONS  
CONOCOPHILLIPS COMPANY  
FLORA VISTA NO. 1  
SAN JUAN COUNTY, NM**

Well ID	Total Depth (ft below TOC)	Elevation*	Screen Interval (ft bgs)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Water Level
MW-1	26.02	94.38	11.02 - 26.02	6/20/2003	NM	NM
				9/23/2003	17.03	77.35
				12/16/2003	20.11	74.27
				3/16/2004	23.69	70.69
				6/21/2004	19.92	74.46
				9/30/2004	16.82	77.56
				12/13/2004	20.40	73.98
				3/22/2005	24.32	70.06
				6/22/2005	NM	NM
				10/24/2005	NM	NM
				12/13/2005	21.24	73.14
				3/22/2006	24.75	69.63
				6/22/2006	20.48	73.90
				10/20/2006	19.13	75.25
				12/13/2006	21.24	73.14
				11/9/2007	19.71	74.67
				1/15/2008	NM	NM
				3/19/2008	24.35	70.03
				7/23/2008	19.89	74.49
				10/21/2008	19.48	74.90
				1/28/2009	23.96	70.42
				9/30/2009	18.16	76.22
				6/10/2010	21.64	72.74
				9/27/2010	19.31	75.07
				12/14/2010	21.41	72.97
				3/17/2011	24.95	69.43
				6/24/2011	22.55	71.83
				9/29/2011	18.37	76.01
				12/14/2011	20.63	73.75
				3/9/2012	24.12	70.26
		93.96		6/7/2012	23.08	70.88
				9/19/2012	18.94	75.02
				12/13/2012	21.22	72.74
				10/21/2008	20.71	76.39
MW-2	31.35	97.1	12.35 - 27.35	1/28/2009	22.75	74.35
				9/30/2009	18.83	78.27
				6/11/2010	22.09	75.01
				9/27/2010	20.12	76.98
				12/14/2010	NM	NM
				3/17/2011	NM	NM
				6/24/2011	22.50	74.60
				9/29/2011	18.95	75.43
				12/14/2011	21.79	75.31
				3/9/2012	25.60	71.50
		97.00		6/7/2012	22.46	74.54
				9/19/2012	17.70	79.30
				12/13/2012	22.43	74.57

TABLE 2

**MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATIONS  
CONOCOPHILLIPS COMPANY  
FLORA VISTA NO. 1  
SAN JUAN COUNTY, NM**

Well ID	Total Depth (ft below TOC)	Elevation*	Screen Interval (ft bgs)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Water Level
MW-3	30.87	92.9	11.87 - 26.87	10/21/2008	17.92	74.98
				1/28/2009	21.53	71.37
				9/30/2009	16.43	76.47
				6/10/2010	19.71	73.19
				9/27/2010	17.81	75.09
				12/14/2010	19.61	73.29
				3/17/2011	23.32	69.58
				6/24/2011	20.55	72.35
				9/29/2011	16.84	77.54
				12/14/2011	19.13	73.77
				3/9/2012	22.51	70.39
		6/7/2012		20.93	71.50	
		9/19/2012		17.48	74.95	
		12/13/2012		19.78	72.65	
MW-4	30.42	93.6	11.42 - 26.42	10/21/2008	18.06	75.54
				1/28/2009	24.55	69.05
				9/30/2009	17.89	75.71
				6/10/2010	21.02	72.58
				9/27/2010	18.93	74.67
				12/14/2010	21.04	72.56
				3/17/2011	24.58	69.02
				6/24/2011	21.80	71.80
				9/29/2011	17.94	76.44
				12/14/2011	20.28	73.32
				3/9/2012	23.70	69.90
		6/7/2012		22.19	70.98	
		9/19/2012		18.60	74.57	
		12/13/2012		20.96	72.21	

**Notes:**

1. \*Casing elevations are based on an arbitrary 100 ft relative surface elevation set at the gas well head
2. ft = Feet
3. TOC = Top of casing
4. bgs = below ground surface
5. NM = Not measured

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS SUMMARY**  
**CONOCOPHILLIPS COMPANY**  
**FLORA VISTA NO. 1**  
**SAN JUAN COUNTY, NM**

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (total) (mg/L)	Sulfate (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
MW-1	MW-1	6/20/2003	(orig)	1.7	0.49	0.3	5.09	--	--	--
	MW-1	9/23/2003	(orig)	7.5	0.66	0.02	9.22	--	--	--
	MW-1	12/16/2003	(orig)	7.93	1.18	0.01	0.864	--	--	--
	MW-1	3/16/2004	(orig)	6.86	1.16	ND	8.47	--	--	--
	MW-1	6/21/2004	(orig)	4.14	0.43	ND	3.12	--	--	--
	MW-1	9/30/2004	(orig)	9.08	1.41	0.03	9.98	--	--	--
	MW-1	12/13/2004	(orig)	8.52	1.34	ND	9.39	--	--	--
	MW-1	3/22/2005	(orig)	4.55	0.85	ND	5.95	--	--	--
	MW-1	6/22/2005	(orig)	--	--	0.02188	--	--	--	--
	MW-1	10/24/2005	(orig)	6.39	1.01	ND	7.416	--	--	--
	MW-1	12/13/2005	(orig)	6.17	1.01	ND	7.57	--	--	--
	MW-1	3/22/2006	(orig)	3.58	0.77	ND	5.84	--	--	--
	MW-1	6/22/2006	(orig)	3.1	0.5	ND	3.5	--	--	--
	MW-1	10/20/2006	(orig)	6.6	1.22	0.01	8.91	--	--	--
	MW-1	12/13/2006	(orig)	4.23	1.09	0.01	8.13	--	--	--
	MW-1	3/27/2007	(orig)	2.37	0.504	0.007	3.749	--	--	--
	MW-1	6/25/2007	(orig)	2.87	0.51	0.14	3.89	--	--	--
	MW-1	11/9/2007	(orig)	5.6	0.91	< 0.0007	6.8	--	--	--
	MW-1	1/15/2008	(orig)	4.2	0.89	< 0.0007	5.7	--	--	--
	MW-1	3/19/2008	(orig)	2.7	0.59	< 0.005	4.7	--	--	--
	MW-1	7/23/2008	(orig)	2	0.38	< 0.005	1.4	--	--	--
	MW-1	10/21/2008	(orig)	4.5	0.63	< 0.005	5.3	--	--	--
	MW-1	1/28/2009	(orig)	4	0.88	< 0.005	8.7	--	--	--
	MW-1	9/30/2009	(orig)	4.2	0.53	0.0016	5.1	11.7	2.08	1.09
	MW-1	6/10/2010	(orig)	1.7	0.33	0.0012	0.99	27	0.126	1.28
	MW-1	9/27/2010	(orig)	3.2	0.53	0.002	4.2016	1.8	7.73	1.19
	MW-1	12/14/2010	(orig)	3.2	0.62	0.0012	5.3016	1.03	4.13	0.888
	MW-1	3/17/2011	(orig)	1.7	0.48	0.0037	4.3092	2.27	1.11	1.07
	GW-74926-062411-PG-01	6/24/2011	(orig)	2.1	0.494	0.0025	2.03	18.4	< 0.1	0.894
	GW-74926-062411-PG-02	6/24/2011	(Duplicate)	1.97	0.458	0.0026	1.94	--	--	--
	GW-074926-092911-CM-009	9/29/2011	(orig)	2.44	0.519	< 0.005	3.65	< 1.0	25.2	1.02
	GW-074926-121411-CB-MW-1	12/14/2011	(orig)	2.31	0.508	0.0055	3.93	13.2	25.4	0.945
	GW-074926-3912-CB-MW-1	3/9/2012	(orig)	1.59	0.636	<0.001	5.04	--	25.3	1.03
	GW-074926-060712-CB-MW-1	6/7/2012	(orig)	1.77	0.182	0.127	0.633	--	21.4	0.914
	GW-074926-091912-JP-MW-1	9/19/2012	(orig)	1.52	0.414	<0.020	2.49	--	19.0	0.86
	GW-074926-121312-CM-MW-1	12/13/2012	(orig)	2.02	0.809	< 0.025	5.02	--	23.8	0.75
MW-2	MW-2	10/21/2008	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	115	--	--
	MW-2	1/28/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	ND	ND	ND
	MW-2	9/30/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	123	0.0223	< 0.005
	MW-2	6/11/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	156	< 0.02	< 0.005
	MW-2	9/27/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	179	< 0.02	< 0.005
	GW-74926-062411-PG-05	6/24/2011	(orig)	< 0.0010	< 0.0010	< 0.0010	< 0.0030	176	0.191	< 0.015
	GW-074926-092911-CM-006	9/29/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	151	< 0.05	< 0.005
	GW-074926-121411-CB-MW-2	12/14/2011	(orig)	0.00031 J	0.0002 J	< 0.001	0.0022 J	135	0.0133 J	0.0022 J
	GW-074926-3912-CB-MW-2	3/9/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	<0.05	<0.005
	GW-074926-060712-CB-MW-2	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	0.0822	0.0052
	GW-074926-091912-JP-MW-2	9/19/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	<0.05	<0.005
	GW-074926-121312-CM-MW-2	12/13/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	<0.05	<0.005

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS SUMMARY**  
**CONOCOPHILLIPS COMPANY**  
**FLORA VISTA NO. 1**  
**SAN JUAN COUNTY, NM**

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (total) (mg/L)	Sulfate (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
MW-3	MW-3	10/21/2008	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	93	--	--
	MW-3	1/28/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	ND	ND	ND
	MW-3	9/30/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	144	0.0543	< 0.005
	MW-3	6/10/2010	(orig)	< 0.0005	< 0.001	< 0.001	< 0.001	122	0.0425	< 0.005
	MW-3	9/27/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	170	< 0.02	< 0.005
	MW-3	12/14/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	142	< 0.02	< 0.005
	MW-3	3/17/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	119	< 0.02	< 0.005
	GW-74926-062411-PG-03	6/24/2011	(orig)	< 0.0010	< 0.0010	< 0.0010	< 0.0030	127	0.189	< 0.015
	GW-074926-092911-CM-007	9/29/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	160	< 0.05	0.0063
	GW-074926-121411-CB-MW-3	12/14/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	136	0.0288 J	0.0207
	GW-074926-3912-CB-MW-3	3/9/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	< 0.05	< 0.005
	GW-074926-060712-CB-MW-3	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	< 0.05	< 0.005
	GW-074926-091912-JP-MW-3	9/19/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	< 0.05	< 0.005
	GW-074926-121312-CM-MW-3	12/13/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	0.0605	0.026
MW-4	MW-4	10/21/2008	(orig)	<b>0.039</b>	0.031	< 0.0005	0.18	90.1	--	--
	MW-4	1/28/2009	(orig)	<b>0.66</b>	0.064	< 0.0005	0.583	ND	ND	ND
	MW-4	9/30/2009	(orig)	<b>0.34</b>	0.054	< 0.0005	0.572	48.9	0.148	<b>4.48</b>
	MW-4	6/10/2010	(orig)	<b>0.14</b>	0.027	< 0.001	0.252	53.3	0.0566	<b>4.65</b>
	MW-4	9/27/2010	(orig)	<b>0.033</b>	0.041	< 0.001	0.274	92.5	<b>1.22</b>	<b>4.34</b>
	MW-4	12/14/2010	(orig)	<b>0.13</b>	0.093	< 0.001	<b>0.899</b>	67.5	<b>1.75</b>	<b>4.69</b>
	MW-4	3/17/2011	(orig)	<b>0.017</b>	0.018	< 0.001	0.1966	83	0.0852	<b>4.46</b>
	GW-74926-062411-PG-04	6/24/2011	(orig)	<b>0.0296</b>	0.0371	< 0.0010	0.472	130	<b>1.5</b>	<b>4.9</b>
	GW-074926-092911-CM-008	9/29/2011	(orig)	<b>0.0392</b>	0.0039	< 0.001	0.0536	96.1	<b>2.55</b>	<b>4.1</b>
	GW-074926-092911-CM-010	9/29/2011	(Duplicate)	<b>0.043</b>	0.0035	< 0.001	0.0483	--	--	--
	GW-074926-121411-CB-MW-4	12/14/2011	(orig)	<b>0.101</b>	0.0443	< 0.001	0.378	81.2	<b>2.62</b>	<b>4.58</b>
	GW-074926-121411-CB-DUP	12/14/2011	(Duplicate)	<b>0.104</b>	0.0437	< 0.005	0.372	--	--	--
	GW-074926-3912-CB-MW-4	3/9/2012	(orig)	<b>0.0264</b>	0.0066	< 0.001	0.0651	--	<b>2.46</b>	<b>4.73</b>
	GW-074926-3912-CB-DUP	3/9/2012	(Duplicate)	<b>0.0234</b>	0.0056	< 0.001	0.058	--	--	--
	GW-074926-060712-CB-MW-4	6/7/2012	(orig)	<b>0.044</b>	0.0245	< 0.001	0.303	--	<b>2.07</b>	<b>4.02</b>
	GW-074926-060712-CB-DUP	6/7/2012	(Duplicate)	<b>0.026</b>	0.0124	< 0.001	0.155	--	--	--
	GW-074926-091912-JP-MW-4	9/19/2012	(orig)	0.0029	0.0048	< 0.001	0.0576	--	<b>1.93</b>	<b>4.5</b>
	GW-074926-091912-JP-DUP	9/19/2012	(Duplicate)	0.0028	0.0045	< 0.001	0.0551	--	--	--
	GW-074926-121312-CM-MW-4	12/13/2012	(orig)	<b>0.0941</b>	0.0399	< 0.002	0.385	--	<b>2.92</b>	<b>4.9</b>
	GW-074926-121312-CM-DUP	12/13/2012	(Duplicate)	<b>0.197</b>	0.0712	< 0.001	0.550	--	--	--
DW-1	DW-1	12/16/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	RS-74926-062411-CB-01	6/24/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074926-072712-JK-DW-17	7/27/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
DW-2	#34	6/10/10	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	Domestic #34	3/17/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	GW-074926-061712-CB-DW34	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
NMWQCC Groundwater Quality Standards				<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>0.62</b>	<b>600</b>	<b>1</b>	<b>0.2</b>

**Notes:**

- MW = monitoring well
- NMWQCC = New Mexico Water Quality Control Commission
- Constituents in **BOLD** are in excess of NMWQCC groundwater quality standards
- mg/L = milligrams per liter (parts per million)
- < 1.0 = Below laboratory detection limit of 1.0 mg/L
- ND = not detected
- = not analyzed

APPENDIX A

2012

QUARTERLY GROUNDWATER SAMPLING FIELD FORMS



# WELL SAMPLING FIELD INFORMATION FORM

WELL/PROJECT NAME: Flora Vista

JOB# 074926

SAMPLE ID: QW-074926-3912-CB-MW-1

WELL# MW-1

## WELL PURGING INFORMATION

3.9.12  
PURGE DATE  
(MM DD YY)

3.9.12  
SAMPLE DATE  
(MM DD YY)

1415  
SAMPLE TIME  
(24 HOUR)

33  
WATER VOL. IN CASING  
(GALLONS)

0.5  
ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

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

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

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

## FIELD MEASUREMENTS

DEPTH TO WATER 24.12 (feet)

WELL ELEVATION 94.38 (feet)

WELL DEPTH 24.2 (feet)

GROUNDWATER ELEVATION 70.26 (feet)

TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
<u>16.67</u> (°C)	<u>6.56</u> (std)	<u>0.748</u> (g/L)	<u>966</u> (µS/cm)	<u>-55.1</u> (mV)	<u>3</u> (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE: slty ODOR: hydrocarbon COLOR: black SHEEN Y/N N

WEATHER CONDITIONS: TEMPERATURE 100 WINDY Y/N N PRECIPITATION Y/N (IF Y TYPE) N

SPECIFIC COMMENTS: 2.08 x 10 = (3328) x 3 = (99)

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

DATE

PRINT

SIGNATURE

3.9.12

Cassie Brown

Cassie Brown

# WELL SAMPLING FIELD INFORMATION FORM

ITE/PROJECT NAME:

Flora Vista

JOB#

074926

SAMPLE ID:

GW-074926-3912CB MW-2

WELL#

MW-2

## WELL PURGING INFORMATION

3.9.12

PURGE DATE  
(MM DD YY)

3.9.12

SAMPLE DATE  
(MM DD YY)

1320

SAMPLE TIME  
(24 HOUR)

0.96

WATER VOL. IN CASING  
(GALLONS)

2.0

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

SAMPLING DEVICE

G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

X=

PURGING DEVICE OTHER (SPECIFY)

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

25.60

(feet)

WELL ELEVATION

97.1

(feet)

WELL DEPTH

31.59

(feet)

GROUNDWATER ELEVATION

71.5

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

15.33 (°C)

6.99 (std)

0.516 (g/L)

1647 (µS/cm)

78.5 (mV)

2.10 (gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

-

COLOR:

tan

SHEEN Y/☒ N

WEATHER CONDITIONS:

TEMPERATURE

~50°

WINDY Y/☒ N

PRECIPITATION Y/☒ N (TYPE)

SPECIFIC COMMENTS:

Well vault found destroyed on arrival. casing still accessible

5199 x .16 = 0.96 x 3 = 2.88

well diked dry @ 1.5 gallons, slow recharge

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

3.9.12

DATE

Cassie Brown

PRINT

Cassie Brown

SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

WELL/PROJECT NAME:

Flora Vista

JOB#

074926

SAMPLE ID:

GW-074926-3912-CB-MW-3

WELL#

MW-3

## WELL PURGING INFORMATION

3.9.12

PURGE DATE  
(MM DD YY)

3.9.12

SAMPLE DATE  
(MM DD YY)

1130

SAMPLE TIME  
(24 HOUR)

1.21

WATER VOL. IN CASING  
(GALLONS)

4.0

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

22.51

(feet)

WELL ELEVATION

92.90

(feet)

WELL DEPTH

30.08

(feet)

GROUNDWATER ELEVATION

70.39

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

15.15 (°C)

7.10 (std)

0.502 (g/L)

627 (µS/cm)

22.2 (mV)

3.0 (gal)

15.13 (°C)

7.07 (std)

0.500 (g/L)

625 (µS/cm)

26.5 (mV)

3.5 (gal)

15.12 (°C)

7.05 (std)

0.500 (g/L)

624 (µS/cm)

30.2 (mV)

4.0 (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

None

COLOR:

brown

SHEEN Y/☒ N

WEATHER CONDITIONS:

TEMPERATURE

~50

WINDY Y/☒ N

PRECIPITATION Y/☒ N (IF Y TYPE)

SPECIFIC COMMENTS:

7.57 x .16 = 1.21 x 3 = 3.63

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

DATE

PRINT

SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME:

Flora Vista

JOB#

074926

SAMPLE ID:

GLW-074926-3912 CB-MW-4

WELL#

MW-4

## WELL PURGING INFORMATION

3.9.12

PURGE DATE  
(MM DD YY)

3.9.12

SAMPLE DATE  
(MM DD YY)

1030

SAMPLE TIME  
(24 HOUR)

1.04

WATER VOL. IN CASING  
(GALLONS)

3.25

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED

☒ Y

N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED

☒ Y

N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

☒ G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒ E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☒ A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

23.70

(feet)

WELL ELEVATION

93.60

(feet)

WELL DEPTH

30.19

(feet)

GROUNDWATER ELEVATION

69.90

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

14.38 (°C)

6.78 (std)

0.620 (g/L)

758 (µS/cm)

-25.2 (mV)

2.75 (gal)

15.04 (°C)

6.75 (std)

0.622 (g/L)

775 (µS/cm)

-46.8 (mV)

3.0 (gal)

15.16 (°C)

6.80 (std)

0.626 (g/L)

782 (µS/cm)

-56.1 (mV)

3.25 (gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

gray/dirty

ODOR: butyric acid

COLOR: gray/black

SHEEN Y/N

WEATHER CONDITIONS:

TEMPERATURE

~50°

WINDY Y/N

PRECIPITATION Y/N (IF Y TYPE)

SPECIFIC COMMENTS:

6.49 x .16 = 1.04 x 3 = 3.12

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

3.9.12

DATE

PRINT

Jason Ploss

SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

FE/PROJECT NAME:

Flora Vista No. 1

JOB#

074926

SAMPLE ID:

GW-074926-00012 (B. MUL)

WELL#

MW-1

## WELL PURGING INFORMATION

6-7-12

PURGE DATE  
(MM DD YY)

6-7-12

SAMPLE DATE  
(MM DD YY)

1000

SAMPLE TIME  
(24 HOUR)

0.51

WATER VOL. IN CASING  
(GALLONS)

0.75\*

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

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

(CIRCLE ONE)

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

(CIRCLE ONE)

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

SAMPLING DEVICE

G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

X=

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

23.00

(feet)

WELL ELEVATION

93.96

(feet)

WELL DEPTH

26.32

(feet)

GROUNDWATER ELEVATION

70.88

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

           (°C)

           (std)

           (g/L)

           (µS/cm)

           (mV)

           (gal)

           (°C)

           (std)

           (g/L)

           (µS/cm)

           (mV)

           (gal)

           (°C)

           (std)

           (g/L)

           (µS/cm)

           (mV)

           (gal)

           (°C)

           (std)

           (g/L)

           (µS/cm)

           (mV)

           (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

slightly cloudy

ODOR:

hydrocarbon

COLOR:

gray

SHEEN Y/(N)

WEATHER CONDITIONS:

TEMPERATURE

~85°

WINDY Y/(N)

PRECIPITATION Y/(N) (Y TYPE)

SPECIFIC COMMENTS:

3.24 x 1.16 = 0.51 x 3 = 1.53

\* Bailed dg @ 0.75 gallons.

No Field Parameters due to low well volume.

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

6-7-12

DATE

Casper Brown

PRINT

Casper Brown

SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME:

Florida Vista No. 1

JOB#

074926

SAMPLE ID:

GW-074926-000712-CB-MW-2

WELL#

MW-2

## WELL PURGING INFORMATION

07.12  
PURGE DATE  
(MM DD YY)

07.12  
SAMPLE DATE  
(MM DD YY)

0940  
SAMPLE TIME  
(24 HOUR)

1.55  
WATER VOL. IN CASING  
(GALLONS)

4.75  
ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

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

(CIRCLE ONE)

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

(CIRCLE ONE)

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

22.46

(feet)

WELL ELEVATION

97.00

(feet)

WELL DEPTH

32.10

(feet)

GROUNDWATER ELEVATION

74.54

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

14.69 (°C)

5.84 (std)

548 (g/L)

676 (µS/cm)

154.2 (mV)

3.50 (gal)

14.70 (°C)

5.89 (std)

544 (g/L)

671 (µS/cm)

161.7 (mV)

4.0 (gal)

14.72 (°C)

6.07 (std)

544 (g/L)

672 (µS/cm)

161.4 (mV)

4.5 (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

milky

ODOR:

None

COLOR:

light brown

SHED Y/N

NO

WEATHER CONDITIONS:

TEMPERATURE

80

WINDY Y/N

N

PRECIPITATION Y/N (IF Y TYPE)

N

SPECIFIC COMMENTS:

9.7 x 11.6 = 1155 x 3 = 4165

bailed dry @ 2 gallons

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

07.12  
DATE

Cass Brown  
PRINT

Cass Brown  
SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME:

Flora Vista No. 1

JOB#

074926

SAMPLE ID:

CAVOTAGE 010112 CB MW-3

WELL#

MW-3

## WELL PURGING INFORMATION

6.7.12

PURGE DATE  
(MM DD YY)

6.7.12

SAMPLE DATE  
(MM DD YY)

0950

SAMPLE TIME  
(24 HOUR)

1.48

WATER VOL. IN CASING  
(GALLONS)

4.5

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

SAMPLING DEVICE

☒ G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

X=

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒ E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☒ A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

20.93

(feet)

WELL ELEVATION

92.43

(feet)

WELL DEPTH

30.13

(feet)

GROUNDWATER ELEVATION

71.50

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

14.67 (°C)

6.51 (std)

502 (g/L)

620 (µS/cm)

148.0 (mV)

3.5 (gal)

14.68 (°C)

6.60 (std)

504 (g/L)

623 (µS/cm)

141.6 (mV)

4 (gal)

14.71 (°C)

6.66 (std)

506 (g/L)

625 (µS/cm)

134.6 (mV)

4.5 (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

None

COLOR:

brown

SHEEN Y/☒ N

WEATHER CONDITIONS:

TEMPERATURE

~80

WINDY Y/☒ N

PRECIPITATION Y/☒ N (IF Y TYPE)

SPECIFIC COMMENTS:

9.25 x 1.48 = 1.48 x 3 (1.44)

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

6.7.12

DATE

Chase Brown

PRINT

Chase Brown

SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME:

Flora Vista No 1

JOB#

079926

SAMPLE ID:

GW079926-020112-CB-MW-1

WELL#

MW-1

## WELL PURGING INFORMATION

0712  
PURGE DATE  
(MM DD YY)

0712  
SAMPLE DATE  
(MM DD YY)

1015  
SAMPLE TIME  
(24 HOUR)

1.35  
WATER VOL. IN CASING  
(GALLONS)

4.25  
ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

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

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

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

22.19

(feet)

WELL ELEVATION

93.17

(feet)

WELL DEPTH

30.68

(feet)

GROUNDWATER ELEVATION

70.98

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

14.96 (°C)

6.78 (std)

564 (g/L)

101 (µS/cm)

-488 (mV)

3.25 (gal)

14.85 (°C)

6.62 (std)

582 (g/L)

122 (µS/cm)

-862 (mV)

3.75 (gal)

14.96 (°C)

6.67 (std)

592 (g/L)

738 (µS/cm)

-117.7 (mV)

4.25 (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

hydrocarbon

COLOR:

dark gray

SHEEN Y N

spotty, slight

WEATHER CONDITIONS:

TEMPERATURE

85°

WINDY Y N

PRECIPITATION Y N (IF Y TYPE)

SPECIFIC COMMENTS:

0.99 x 1.12 = 1.35 x 3 = 4.07

Dup @ 1005

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

0712  
DATE

Bobie Brown  
PRINT

Bobie Brown  
SIGNATURE



# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME:

Flora Vista No. 1

JOB#

074926

SAMPLE ID:

GW-074926-91912-JP-MW-1

WELL#

MW-1

## WELL PURGING INFORMATION

9.19.12

PURGE DATE  
(MM DD YY)

9.19.12

SAMPLE DATE  
(MM DD YY)

1425

SAMPLE TIME  
(24 HOUR)

1.16

WATER VOL. IN CASING  
(GALLONS)

3.5

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

☒ G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒ E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☒ A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

18.94

(feet)

WELL ELEVATION

93.96

(feet)

WELL DEPTH

26.21

(feet)

GROUNDWATER ELEVATION

75.02

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

16.54 (°C)

5.98 (std)

0.974 (g/L)

1257 (µS/cm)

-90.2 (mV)

3.5 (gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

slightly cloudy

ODOR:

hydrocarbon

COLOR:

slight gray

SHEEN: Y/N

very slight, spotty

WEATHER CONDITIONS:

TEMPERATURE

~85

WINDY Y/N

☒ Y

PRECIPITATION Y/N (IF Y TYPE)

☒ Y

SPECIFIC COMMENTS:

Vol x3 = 3.49

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

DATE

9.19.12

PRINT

Jason Hoss

SIGNATURE

[Signature]

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME:

Florida Vol. No 1

JOB#

074926

SAMPLE ID:

GU-074926-091912-JP-MW-2

WELL#

MW-2

## WELL PURGING INFORMATION

9.19.12

PURGE DATE  
(MM DD YY)

9.19.12

SAMPLE DATE  
(MM DD YY)

1430

SAMPLE TIME  
(24 HOUR)

2.27

WATER VOL. IN CASING  
(GALLONS)

7.0

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

PURGING DEVICE

☒

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

☒

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☒

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

17.70

(feet)

WELL ELEVATION

97.00

(feet)

WELL DEPTH

31.89

(feet)

GROUNDWATER ELEVATION

79.30

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

21.44 (°C)

6.38 (std)

0.774 (g/L)

1117 (µS/cm)

159.0 (mV)

6.0 (gal)

21.17 (°C)

6.34 (std)

0.776 (g/L)

1108 (µS/cm)

149.1 (mV)

6.5 (gal)

21.47 (°C)

6.33 (std)

0.776 (g/L)

1114 (µS/cm)

134.2 (mV)

7.0 (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

\_\_\_\_\_ (°C)

\_\_\_\_\_ (std)

\_\_\_\_\_ (g/L)

\_\_\_\_\_ (µS/cm)

\_\_\_\_\_ (mV)

\_\_\_\_\_ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

Nine

COLOR:

brown

SHEEN Y/☒ N

WEATHER CONDITIONS:

TEMPERATURE

~85°

WINDY Y/☒ N

PRECIPITATION Y/☒ N (TYPE)

SPECIFIC COMMENTS:

Vol X32 6.81

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

9.19.12  
DATE

Jason Floss  
PRINT

[Signature]  
SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME: Flora Vista #1 JOB# 074926  
 SAMPLE ID: GW-024426-091912-JR-MW-3 WELL# MW-3

## WELL PURGING INFORMATION

9.19.12 09.19.12 1630 1.97 6.75  
 PURGE DATE (MM DD YY) SAMPLE DATE (MM DD YY) SAMPLE TIME (24 HOUR) WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ N (CIRCLE ONE) SAMPLING EQUIPMENT.....DEDICATED ☒ N (CIRCLE ONE)

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

## FIELD MEASUREMENTS

DEPTH TO WATER	<u>17.48</u>	(feet)	WELL ELEVATION	<u>92.43</u>	(feet)
WELL DEPTH	<u>29.80</u>	(feet)	GROUNDWATER ELEVATION	<u>74.95</u>	(feet)

TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
<u>15.26</u> (°C)	<u>7.04</u> (std)	<u>0.677</u> (g/L)	<u>847</u> (µS/cm)	<u>-13.7</u> (mV)	<u>6.25</u> (gal)
<u>15.17</u> (°C)	<u>7.89</u> (std)	<u>0.673</u> (g/L)	<u>842</u> (µS/cm)	<u>-7.6</u> (mV)	<u>6.50</u> (gal)
<u>15.07</u> (°C)	<u>6.65</u> (std)	<u>0.671</u> (g/L)	<u>836</u> (µS/cm)	<u>11.0</u> (mV)	<u>6.75</u> (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE: \_\_\_\_\_ ODOR: \_\_\_\_\_ COLOR: \_\_\_\_\_ SHEEN Y/N \_\_\_\_\_  
 WEATHER CONDITIONS: TEMPERATURE \_\_\_\_\_ WINDY Y/N \_\_\_\_\_ PRECIPITATION Y/N (IF Y TYPE) \_\_\_\_\_  
 SPECIFIC COMMENTS: \_\_\_\_\_

Vol x3 = 5.91

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

9/19/12  
DATE

Jason Ploss  
PRINT

\_\_\_\_\_  
SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

TE/PROJECT NAME: Flora vista # 1.

JOB# 074926

SAMPLE ID: G0074926-091912-JP-MW-4

WELL# MW-4

## WELL PURGING INFORMATION

9.19.12  
PURGE DATE  
(MM DD YY)

09.19.12  
SAMPLE DATE  
(MM DD YY)

1620  
SAMPLE TIME  
(24 HOUR)

1.88  
WATER VOL. IN CASING  
(GALLONS)

6.0  
ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

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

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

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

## FIELD MEASUREMENTS

DEPTH TO WATER	<u>18.60</u>	(feet)	WELL ELEVATION	<u>93.17</u>	(feet)
WELL DEPTH	<u>30.35</u>	(feet)	GROUNDWATER ELEVATION	<u>74.57</u>	(feet)

TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
<u>15.78</u> (°C)	<u>6.11</u> (std)	<u>0.653</u> (g/L)	<u>829</u> (µS/cm)	<u>-124.9</u> (mV)	<u>520</u> (gal)
<u>15.61</u> (°C)	<u>5.97</u> (std)	<u>0.653</u> (g/L)	<u>824</u> (µS/cm)	<u>-119.9</u> (mV)	<u>5.5</u> (gal)
<u>15.35</u> (°C)	<u>5.99</u> (std)	<u>0.653</u> (g/L)	<u>819</u> (µS/cm)	<u>-120.0</u> (mV)	<u>6.0</u> (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)
_____ (°C)	_____ (std)	_____ (g/L)	_____ (µS/cm)	_____ (mV)	_____ (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE: cloudy ODOR: hydrocarbon COLOR: gray SHEEN ☒ Y N slight

WEATHER CONDITIONS: TEMPERATURE ~80° WIND ☒ Y N breezy PRECIPITATION ☒ Y N (IF Y TYPE) \_\_\_\_\_

SPECIFIC COMMENTS: Vol x32 5.64

Dup @ 1625

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

9/19/12  
DATE

Jason Ploss  
PRINT

[Signature]  
SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Flora Vista

JOB#

074926

SAMPLE ID:

GW-074926-121312-CM-MW-1

WELL#

MW-1

## WELL PURGING INFORMATION

12/13/12  
PURGE DATE  
(MM DD YY)

12/13/12  
SAMPLE DATE  
(MM DD YY)

1055  
SAMPLE TIME  
(24 HOUR)

0.82  
WATER VOL. IN CASING  
(GALLONS)

2.5  
ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

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

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

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

☒ G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒ E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☐

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

21.22

(feet)

WELL ELEVATION

93.96

(feet)

WELL DEPTH

26.33

(feet)

GROUNDWATER ELEVATION

72.74

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

15.90 (°C)

6.82 (std)

0.790 (g/L)

1004 (µS/cm)

-100.4 (mV)

2.25 (gal)

   (°C)

   (std)

   (g/L)

   (µS/cm)

   (mV)

   (gal)

   (°C)

   (std)

   (g/L)

   (µS/cm)

   (mV)

   (gal)

   (°C)

   (std)

   (g/L)

   (µS/cm)

   (mV)

   (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

ODOR:

COLOR:

SHEN Y/N

WEATHER CONDITIONS:

TEMPERATURE

WINDY Y/N

PRECIPITATION Y/N (IF Y TYPE)

SPECIFIC COMMENTS:

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

12/13/12  
DATE

Christina Matthews  
PRINT

Christina Matthews  
SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Flora Vista

JOB#

074926

SAMPLE ID:

GW-074926-121312-CM-MW-2

WELL#

MW-2

## WELL PURGING INFORMATION

12/13/12

PURGE DATE  
(MM DD YY)

12/13/12

SAMPLE DATE  
(MM DD YY)

1045

SAMPLE TIME  
(24 HOUR)

1.51

WATER VOL. IN CASING  
(GALLONS)

5.0

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

☒ G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒ E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☐

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

22.43

(feet)

WELL ELEVATION

97.00

(feet)

WELL DEPTH

31.89

(feet)

GROUNDWATER ELEVATION

74.57

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

18.57 (°C)

7.15 (std)

0.647 (g/L)

874 (µS/cm)

-28.8 (mV)

3.5 (gal)

19.24 (°C)

7.13 (std)

0.645 (g/L)

883 (µS/cm)

-26.3 (mV)

4.0 (gal)

19.25 (°C)

7.13 (std)

0.644 (g/L)

882 (µS/cm)

-10.7 (mV)

4.5 (gal)

       (°C)

       (std)

       (g/L)

       (µS/cm)

       (mV)

       (gal)

       (°C)

       (std)

       (g/L)

       (µS/cm)

       (mV)

       (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

ODOR:

COLOR:

SHEEN Y/N

WEATHER CONDITIONS:

TEMPERATURE

WINDY Y/N

PRECIPITATION Y/N (IF Y TYPE)

SPECIFIC COMMENTS:

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

DATE

12/13/12

PRINT

Christine Mathews

SIGNATURE

Christine Mathews

# WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME: Flora Vista JOB# 074926  
 SAMPLE ID: GW-074926-120312-CM-MW-3 WELL# MW-3

## WELL PURGING INFORMATION

12/13/12 12/13/12 1005 1.50 5.0  
 PURGE DATE SAMPLE DATE SAMPLE TIME WATER VOL. IN CASING ACTUAL VOL. PURGED  
 (MM DD YY) (MM DD YY) (24 HOUR) (GALLONS) (GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ Y ☐ N SAMPLING EQUIPMENT.....DEDICATED ☒ Y ☐ N  
 (CIRCLE ONE) (CIRCLE ONE)

PURGING DEVICE	[ <u>G</u> ]	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X= _____
		B - PERISTALTIC PUMP	E - PURGE PUMP	H - WATERRA®	PURGING DEVICE OTHER (SPECIFY)
SAMPLING DEVICE	[ <u>G</u> ]	C - BLADDER PUMP	F - DIPPER BOTTLE	X - OTHER	X= _____
					SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL	[ <u>E</u> ]	A - TEFLON	D - PVC		X= _____
		B - STAINLESS STEEL	E - POLYETHYLENE		PURGING MATERIAL OTHER (SPECIFY)
SAMPLING MATERIAL	[ <u>E</u> ]	C - POLYPROPYLENE	X - OTHER		X= _____
					SAMPLING MATERIAL OTHER (SPECIFY)
PURGE TUBING	[ <u>C</u> ]	A - TEFLON	D - POLYPROPYLENE	G - COMBINATION	X= _____
		B - TYGON	E - POLYETHYLENE	TEFLON/POLYPROPYLENE	PURGE TUBING OTHER (SPECIFY)
SAMPLING TUBING	[ <u>C</u> ]	C - ROPE	F - SILICONE	X - OTHER	X= _____
					SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45 [ ] A - IN-LINE DISPOSABLE B - PRESSURE C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER	[ <u>19.78</u> ]	(feet)	WELL ELEVATION	[ <u>92.43</u> ]	(feet)
WELL DEPTH	[ <u>29.75</u> ]	(feet)	GROUNDWATER ELEVATION	[ <u>72.65</u> ]	(feet)

TEMPERATURE	pH	TDS	CONDUCTIVITY	ORP	VOLUME
[ <u>13.50</u> ] (°C)	[ <u>6.97</u> ] (std)	[ <u>0.623</u> ] (g/L)	[ <u>749</u> ] (µS/cm)	[ <u>45.6</u> ] (mV)	[ <u>3.75</u> ] (gal)
[ <u>15.35</u> ] (°C)	[ <u>6.99</u> ] (std)	[ <u>0.642</u> ] (g/L)	[ <u>806</u> ] (µS/cm)	[ <u>30.1</u> ] (mV)	[ <u>4.25</u> ] (gal)
[ <u>15.51</u> ] (°C)	[ <u>6.99</u> ] (std)	[ <u>0.635</u> ] (g/L)	[ <u>801</u> ] (µS/cm)	[ <u>0.70</u> ] (mV)	[ <u>4.75</u> ] (gal)
[ ] (°C)	[ ] (std)	[ ] (g/L)	[ ] (µS/cm)	[ ] (mV)	[ ] (gal)
[ ] (°C)	[ ] (std)	[ ] (g/L)	[ ] (µS/cm)	[ ] (mV)	[ ] (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE: \_\_\_\_\_ ODOR: \_\_\_\_\_ COLOR: \_\_\_\_\_ SHEEN Y/N \_\_\_\_\_  
 WEATHER CONDITIONS: TEMPERATURE \_\_\_\_\_ WINDY Y/N \_\_\_\_\_ PRECIPITATION Y/N (IF Y TYPE) \_\_\_\_\_  
 SPECIFIC COMMENTS: \_\_\_\_\_

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

12/13/12  
DATE

Christine Matthews  
PRINT

Christine Matthews  
SIGNATURE

# WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Flora Vista

JOB#

074926

SAMPLE ID:

GW-074926-121312-CM-MW-4

WELL#

MW-4

## WELL PURGING INFORMATION

12/13/12

PURGE DATE  
(MM DD YY)

12/13/12

SAMPLE DATE  
(MM DD YY)

1025

SAMPLE TIME  
(24 HOUR)

1.57

WATER VOL. IN CASING  
(GALLONS)

5.0

ACTUAL VOL. PURGED  
(GALLONS)

## PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ N

(CIRCLE ONE)

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

SAMPLING DEVICE

G

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☐

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

## FIELD MEASUREMENTS

DEPTH TO WATER

20.96

(feet)

WELL ELEVATION

93.17

(feet)

WELL DEPTH

30.40

(feet)

GROUNDWATER ELEVATION

72.21

(feet)

TEMPERATURE

pH

TDS

CONDUCTIVITY

ORP

VOLUME

15.29 (°C)

6.99 (std)

0.732 (g/L)

918 (µS/cm)

-89.3 (mV)

3.5 (gal)

15.80 (°C)

6.93 (std)

0.736 (g/L)

934 (µS/cm)

-128.8 (mV)

4.0 (gal)

15.73 (°C)

6.96 (std)

0.743 (g/L)

940 (µS/cm)

-133.2 (mV)

4.5 (gal)

   (°C)

   (std)

   (g/L)

   (µS/cm)

   (mV)

   (gal)

   (°C)

   (std)

   (g/L)

   (µS/cm)

   (mV)

   (gal)

## FIELD COMMENTS

SAMPLE APPEARANCE:

ODOR:

COLOR:

SHEN Y/N

WEATHER CONDITIONS:

TEMPERATURE

WINDY Y/N

PRECIPITATION Y/N (IF Y TYPE)

SPECIFIC COMMENTS:

Dop @ 1030

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

DATE

12/13/12

PRINT

Christine Matthews

SIGNATURE

Christine Matthews



## APPENDIX B

2012

### QUARTERLY GROUNDWATER LABORATORY ANALYTICAL REPORTS

March 23, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: FLORA VISTA NO. 1 (074926)  
Pace Project No.: 60117008

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Tracy

alice.tracy@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Page 1 of 19

## CERTIFICATIONS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 05-008-0

Illinois Certification #: 001191

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-08-TX

Utah Certification #: 9135995665

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60117008001	GW-074926-3912-CB-MW-1	Water	03/09/12 14:15	03/10/12 09:00
60117008002	GW-074926-3912-CB-MW-2	Water	03/09/12 13:20	03/10/12 09:00
60117008003	GW-074926-3912-CB-MW-3	Water	03/09/12 11:30	03/10/12 09:00
60117008004	GW-074926-3912-CB-MW-4	Water	03/09/12 10:30	03/10/12 09:00
60117008005	GW-074926-3912-CB-DUP	Water	03/09/12 10:35	03/10/12 09:00
60117008006	TRIP BLANK	Water	03/09/12 15:00	03/10/12 09:00

## REPORT OF LABORATORY ANALYSIS

Page 3 of 19

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## SAMPLE ANALYTE COUNT

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60117008001	GW-074926-3912-CB-MW-1	EPA 6010	JGP	2
		EPA 8260	RNS	9
60117008002	GW-074926-3912-CB-MW-2	EPA 6010	JGP	2
		EPA 8260	RNS	9
60117008003	GW-074926-3912-CB-MW-3	EPA 6010	JGP	2
		EPA 8260	RNS	9
60117008004	GW-074926-3912-CB-MW-4	EPA 6010	JGP	2
		EPA 8260	RNS	9
60117008005	GW-074926-3912-CB-DUP	EPA 8260	RNS	9
60117008006	TRIP BLANK	EPA 8260	RNS	9

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

---

**Method:** EPA 6010

**Description:** 6010 MET ICP, Dissolved

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** March 23, 2012

**General Information:**

4 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

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

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

Page 5 of 19

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## PROJECT NARRATIVE

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** March 23, 2012

**General Information:**

6 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/44314

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

QC Batch: MSV/44384

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

QC Batch: MSV/44403

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

**Duplicate Sample:**

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

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

Page 6 of 19

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## PROJECT NARRATIVE

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** March 23, 2012

Analyte Comments:

QC Batch: MSV/44314

B: Analyte was detected in the associated method blank.

- GW-074926-3912-CB-DUP (Lab ID: 60117008005)
  - Toluene
- GW-074926-3912-CB-MW-1 (Lab ID: 60117008001)
  - Toluene
- GW-074926-3912-CB-MW-2 (Lab ID: 60117008002)
  - Toluene

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

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Sample: GW-074926-3912-CB-MW-1 Lab ID: 60117008001 Collected: 03/09/12 14:15 Received: 03/10/12 09:00 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	25300	ug/L	50.0	6.0	1	03/14/12 16:35	03/20/12 12:36	7439-89-6	
Manganese, Dissolved	1030	ug/L	5.0	0.90	1	03/14/12 16:35	03/20/12 12:36	7439-96-5	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	1590	ug/L	50.0	2.0	50		03/22/12 11:35	71-43-2	
Ethylbenzene	636	ug/L	50.0	5.0	50		03/22/12 11:35	100-41-4	
Toluene	0.87J	ug/L	1.0	0.10	1		03/20/12 11:46	108-88-3	B
Xylene (Total)	5040	ug/L	150	15.0	50		03/22/12 11:35	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	98	%	86-112		1		03/20/12 11:46	1868-53-7	
Toluene-d8 (S)	104	%	90-110		1		03/20/12 11:46	2037-26-5	
4-Bromofluorobenzene (S)	100	%	87-113		1		03/20/12 11:46	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	82-119		1		03/20/12 11:46	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		03/20/12 11:46		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

**Sample:** GW-074926-3912-CB-MW-2 **Lab ID:** 60117008002 Collected: 03/09/12 13:20 Received: 03/10/12 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
			Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron, Dissolved	ND	ug/L	50.0	6.0	1	03/14/12 16:35	03/20/12 12:40	7439-89-6	
Manganese, Dissolved	<b>2.3J</b>	ug/L	5.0	0.90	1	03/14/12 16:35	03/20/12 12:40	7439-96-5	
<b>8260 MSV UST, Water</b>									
			Analytical Method: EPA 8260						
Benzene	<b>0.32J</b>	ug/L	1.0	0.040	1		03/20/12 12:21	71-43-2	
Ethylbenzene	<b>0.34J</b>	ug/L	1.0	0.10	1		03/20/12 12:21	100-41-4	
Toluene	<b>0.14J</b>	ug/L	1.0	0.10	1		03/20/12 12:21	108-88-3	B
Xylene (Total)	ND	ug/L	3.0	0.30	1		03/21/12 15:54	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	99 %		86-112		1		03/20/12 12:21	1868-53-7	
Toluene-d8 (S)	99 %		90-110		1		03/20/12 12:21	2037-26-5	
4-Bromofluorobenzene (S)	100 %		87-113		1		03/20/12 12:21	460-00-4	
1,2-Dichloroethane-d4 (S)	95 %		82-119		1		03/20/12 12:21	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		03/20/12 12:21		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

**Sample:** GW-074926-3912-CB-MW-3 **Lab ID:** 60117008003 Collected: 03/09/12 11:30 Received: 03/10/12 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	27.7J	ug/L	50.0	6.0	1	03/14/12 16:35	03/20/12 12:44	7439-89-6	
Manganese, Dissolved	2.5J	ug/L	5.0	0.90	1	03/14/12 16:35	03/20/12 12:44	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	0.13J	ug/L	1.0	0.040	1		03/20/12 12:39	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.10	1		03/20/12 12:39	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		03/20/12 12:39	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.30	1		03/20/12 12:39	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	98 %		86-112		1		03/20/12 12:39	1868-53-7	
Toluene-d8 (S)	99 %		90-110		1		03/20/12 12:39	2037-26-5	
4-Bromofluorobenzene (S)	99 %		87-113		1		03/20/12 12:39	460-00-4	
1,2-Dichloroethane-d4 (S)	93 %		82-119		1		03/20/12 12:39	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		03/20/12 12:39		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Sample: GW-074926-3912-CB-MW-4 Lab ID: 60117008004 Collected: 03/09/12 10:30 Received: 03/10/12 09:00 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	2460	ug/L	50.0	6.0	1	03/14/12 16:35	03/20/12 12:47	7439-89-6	
Manganese, Dissolved	4730	ug/L	5.0	0.90	1	03/14/12 16:35	03/20/12 12:47	7439-96-5	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	26.4	ug/L	1.0	0.040	1		03/20/12 12:56	71-43-2	
Ethylbenzene	6.6	ug/L	1.0	0.10	1		03/20/12 12:56	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		03/20/12 12:56	108-88-3	
Xylene (Total)	65.1	ug/L	3.0	0.30	1		03/20/12 12:56	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	98	%	86-112		1		03/20/12 12:56	1868-53-7	
Toluene-d8 (S)	99	%	90-110		1		03/20/12 12:56	2037-26-5	
4-Bromofluorobenzene (S)	103	%	87-113		1		03/20/12 12:56	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	82-119		1		03/20/12 12:56	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		03/20/12 12:56		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Sample: GW-074926-3912-CB-DUP    Lab ID: 60117008005    Collected: 03/09/12 10:35    Received: 03/10/12 09:00    Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	23.4	ug/L	5.0	0.20	5		03/20/12 13:14	71-43-2	
Ethylbenzene	5.6	ug/L	5.0	0.50	5		03/20/12 13:14	100-41-4	
Toluene	0.54J	ug/L	5.0	0.50	5		03/20/12 13:14	108-88-3	B
Xylene (Total)	58.0	ug/L	15.0	1.5	5		03/20/12 13:14	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	96	%	86-112		5		03/20/12 13:14	1868-53-7	
Toluene-d8 (S)	100	%	90-110		5		03/20/12 13:14	2037-26-5	
4-Bromofluorobenzene (S)	100	%	87-113		5		03/20/12 13:14	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	82-119		5		03/20/12 13:14	17060-07-0	
Preservation pH	1.0		1.0	0.10	5		03/20/12 13:14		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Sample: TRIP BLANK		Lab ID: 60117008006		Collected: 03/09/12 15:00		Received: 03/10/12 09:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water		Analytical Method: EPA 8260							
Benzene	0.052J	ug/L	1.0	0.040	1		03/20/12 13:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.10	1		03/20/12 13:31	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		03/20/12 13:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.30	1		03/20/12 13:31	1330-20-7	
Surrogates									
Dibromofluoromethane (S)	96	%	86-112		1		03/20/12 13:31	1868-53-7	
Toluene-d8 (S)	97	%	90-110		1		03/20/12 13:31	2037-26-5	
4-Bromofluorobenzene (S)	103	%	87-113		1		03/20/12 13:31	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	82-119		1		03/20/12 13:31	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		03/20/12 13:31		

## QUALITY CONTROL DATA

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

QC Batch: MPRP/17310 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60117008001, 60117008002, 60117008003, 60117008004

METHOD BLANK: 965102 Matrix: Water  
Associated Lab Samples: 60117008001, 60117008002, 60117008003, 60117008004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	41.8J	50.0	03/20/12 11:47	
Manganese, Dissolved	ug/L	ND	5.0	03/20/12 11:47	

LABORATORY CONTROL SAMPLE: 965103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	10000	100	80-120	
Manganese, Dissolved	ug/L	1000	1000	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 965104 965105

Parameter	Units	60117005001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	40.9J	10000	10000	10800	10800	107	107	75-125	0	20	
Manganese, Dissolved	ug/L	955	1000	1000	1810	1820	86	87	75-125	0	20	

## QUALITY CONTROL DATA

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

QC Batch: MSV/44314

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60117008001, 60117008002, 60117008003, 60117008004, 60117008005, 60117008006

METHOD BLANK: 967867

Matrix: Water

Associated Lab Samples: 60117008001, 60117008002, 60117008003, 60117008004, 60117008005, 60117008006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	03/20/12 10:01	
Ethylbenzene	ug/L	ND	1.0	03/20/12 10:01	
Toluene	ug/L	0.14J	1.0	03/20/12 10:01	
Xylene (Total)	ug/L	ND	3.0	03/20/12 10:01	
1,2-Dichloroethane-d4 (S)	%	96	82-119	03/20/12 10:01	
4-Bromofluorobenzene (S)	%	102	87-113	03/20/12 10:01	
Dibromofluoromethane (S)	%	97	86-112	03/20/12 10:01	
Toluene-d8 (S)	%	100	90-110	03/20/12 10:01	

LABORATORY CONTROL SAMPLE: 967868

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.8	104	82-117	
Ethylbenzene	ug/L	20	20.5	102	79-121	
Toluene	ug/L	20	20.3	102	80-120	
Xylene (Total)	ug/L	60	64.1	107	79-120	
1,2-Dichloroethane-d4 (S)	%			95	82-119	
4-Bromofluorobenzene (S)	%			100	87-113	
Dibromofluoromethane (S)	%			99	86-112	
Toluene-d8 (S)	%			100	90-110	



## QUALITY CONTROL DATA

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

QC Batch: MSV/44384

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60117008002

METHOD BLANK: 969122

Matrix: Water

Associated Lab Samples: 60117008002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Xylene (Total)	ug/L	ND	3.0	03/21/12 14:44	
1,2-Dichloroethane-d4 (S)	%	94	82-119	03/21/12 14:44	
4-Bromofluorobenzene (S)	%	100	87-113	03/21/12 14:44	
Dibromofluoromethane (S)	%	98	86-112	03/21/12 14:44	
Toluene-d8 (S)	%	99	90-110	03/21/12 14:44	

LABORATORY CONTROL SAMPLE: 969123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	60	62.8	105	79-120	
1,2-Dichloroethane-d4 (S)	%			95	82-119	
4-Bromofluorobenzene (S)	%			99	87-113	
Dibromofluoromethane (S)	%			98	86-112	
Toluene-d8 (S)	%			100	90-110	

## QUALITY CONTROL DATA

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

QC Batch: MSV/44403

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60117008001

METHOD BLANK: 969461

Matrix: Water

Associated Lab Samples: 60117008001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	03/22/12 11:00	
Ethylbenzene	ug/L	ND	1.0	03/22/12 11:00	
Xylene (Total)	ug/L	ND	3.0	03/22/12 11:00	
1,2-Dichloroethane-d4 (S)	%	95	82-119	03/22/12 11:00	
4-Bromofluorobenzene (S)	%	102	87-113	03/22/12 11:00	
Dibromofluoromethane (S)	%	96	86-112	03/22/12 11:00	
Toluene-d8 (S)	%	98	90-110	03/22/12 11:00	

LABORATORY CONTROL SAMPLE: 969462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.6	103	82-117	
Ethylbenzene	ug/L	20	21.2	106	79-121	
Xylene (Total)	ug/L	60	66.5	111	79-120	
1,2-Dichloroethane-d4 (S)	%			91	82-119	
4-Bromofluorobenzene (S)	%			100	87-113	
Dibromofluoromethane (S)	%			96	86-112	
Toluene-d8 (S)	%			98	90-110	

## QUALIFIERS

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

### BATCH QUALIFIERS

Batch: MSV/44314

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

Batch: MSV/44384

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

Batch: MSV/44403

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

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FLORA VISTA NO. 1 (074926)

Pace Project No.: 60117008

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60117008001	GW-074926-3912-CB-MW-1	EPA 3010	MPRP/17310	EPA 6010	ICP/14765
60117008002	GW-074926-3912-CB-MW-2	EPA 3010	MPRP/17310	EPA 6010	ICP/14765
60117008003	GW-074926-3912-CB-MW-3	EPA 3010	MPRP/17310	EPA 6010	ICP/14765
60117008004	GW-074926-3912-CB-MW-4	EPA 3010	MPRP/17310	EPA 6010	ICP/14765
60117008001	GW-074926-3912-CB-MW-1	EPA 8260	MSV/44314		
60117008001	GW-074926-3912-CB-MW-1	EPA 8260	MSV/44403		
60117008002	GW-074926-3912-CB-MW-2	EPA 8260	MSV/44314		
60117008002	GW-074926-3912-CB-MW-2	EPA 8260	MSV/44384		
60117008003	GW-074926-3912-CB-MW-3	EPA 8260	MSV/44314		
60117008004	GW-074926-3912-CB-MW-4	EPA 8260	MSV/44314		
60117008005	GW-074926-3912-CB-DUP	EPA 8260	MSV/44314		
60117008006	TRIP BLANK	EPA 8260	MSV/44314		

# CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	CRA	Report To:	Christine Mathews	Attention:	ENFOS
Address:	6121 Indian School Rd NE, Ste 200 Albuquerque, NM 87110	Copy To:	Kelly Blanchard, Angela Bown	Company Name:	
Email To:	cmathews@craworld.com	Purchase Order No.:	4515860224	Address:	
Phone:	(505)884-0672	Project Name:	Flora Vista No. 1	Pace Quote Reference:	
Requested Due Date/TAT:	standard	Project Number:	074926	Pace Project Manager:	Alice Tracy

REGULATORY AGENCY	
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER	<input checked="" type="checkbox"/> OTHER <b>IMCOP</b>
<input type="checkbox"/> UST <input type="checkbox"/> RCRA	
Site Location	NM
STATE:	

ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Y/N	Requested Analysis Filtered (Y/N)												Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					COMPOSITE START	COMPOSITE END/GRAB																			
1	GW-074926-3912-CB-MW-1	DRINKING WATER	DW	WTG	---	39.12.146	---	4	Unpreserved	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	01
2	GW-074926-3912-CB-MW-2	WATER	WT	WTG	---	39.12.140	---	4	H <sub>2</sub> SO <sub>4</sub>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	02
3	GW-074926-3912-CB-MW-3	WASTE WATER	WW	WTG	---	39.12.130	---	4	NaOH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	03
4	GW-074926-3912-CB-MW-4	PRODUCT	P	WTG	---	39.12.1050	---	4	HCl	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	04
5	GW-074926-3912-CB-MW-5	SOL/SOLID	SL	WTG	---	39.12.1035	---	3	HNO <sub>3</sub>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	05
6	GW-074926-3912-CB-MW-6	OIL	OL	WTG	---	39.12.1000	---	3	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	06
7	MP blank	WIPE	WP	WTG	---	---	---	---	Other																
8		AIR	AR						Methanol																
9		OTHER	OT						Other																
10		TISSUE	TS																						
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
mobiles were field filtered	Cassie Bown/CRA	39.12	1500	Cassie Bown	3-10-12	0900	2.5 Y
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Cassie Bown SIGNATURE OF SAMPLER: <i>Cassie Bown</i>							
DATE Signed (MM/DD/YY): 39.12							
Temp in °C	Received on	Cooler (Y/N)	Custody Sealed	Samples Intact (Y/N)			



# Sample Condition Upon Receipt – ESI Tech Specs

Client Name: CRA

Project #: 60117008

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 898638321810

Pace Shipping Label Used? Yes ☐ No ☒

Optional

Proj Due Date: 3/22/12

Proj Name:

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☐

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 2-5

Date and initials of person examining contents: AL 3-10-12

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
-Includes date/time/ID/analyses Matrix:	<u>WT</u>	15.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17.
Exceptions: <u>VOA</u> coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased): <u>021312-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>PA</u>

## Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

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

Start: <u>1245</u>	Start:
End: <u>1250</u>	End:
Temp:	Temp:

Project Manager Review: MF

Date: 3/12/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

June 19, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: FLORA VISTA NO 1  
Pace Project No.: 60122944

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on June 08, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 05-008-0

Illinois Certification #: 001191

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-08-TX

Utah Certification #: 9135995665

---

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60122944001	GW-074926-060712-CB-MW-1	Water	06/07/12 10:00	06/08/12 08:45
60122944002	GW-074926-060712-CB-MW-2	Water	06/07/12 09:40	06/08/12 08:45
60122944003	GW-074926-060712-CB-MW-3	Water	06/07/12 09:50	06/08/12 08:45
60122944004	GW-074926-060712-CB-MW-4	Water	06/07/12 10:15	06/08/12 08:45
60122944005	GW-074926-060712-CB-DUP	Water	06/07/12 10:05	06/08/12 08:45
60122944006	GW-074926-060712-CB-DW34	Water	06/07/12 11:20	06/08/12 08:45
60122944007	TRIP BLANK	Water	06/07/12 00:00	06/08/12 08:45

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60122944001	GW-074926-060712-CB-MW-1	EPA 6010	JDH	2
		EPA 8260	PRG	9
60122944002	GW-074926-060712-CB-MW-2	EPA 6010	JDH	2
		EPA 8260	PRG	9
60122944003	GW-074926-060712-CB-MW-3	EPA 6010	JDH	2
		EPA 8260	PRG	9
60122944004	GW-074926-060712-CB-MW-4	EPA 6010	JDH	2
		EPA 8260	PRG	9
60122944005	GW-074926-060712-CB-DUP	EPA 8260	RNS	9
60122944006	GW-074926-060712-CB-DW34	EPA 8260	HNS, PRG	9
60122944007	TRIP BLANK	EPA 8260	PRG	9

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

---

**Method:** EPA 6010

**Description:** 6010 MET ICP, Dissolved

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** June 19, 2012

**General Information:**

4 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

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

**Additional Comments:**

Analyte Comments:

QC Batch: MPRP/18387

B: Analyte was detected in the associated method blank.

- GW-074926-060712-CB-MW-1 (Lab ID: 60122944001)
  - Manganese, Dissolved
- GW-074926-060712-CB-MW-4 (Lab ID: 60122944004)
  - Manganese, Dissolved

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** June 19, 2012

**General Information:**

7 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/46221

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

QC Batch: MSV/46307

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

QC Batch: MSV/46343

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

**Duplicate Sample:**

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

**Additional Comments:**

Batch Comments:

- QC Batch: MSV / 46346

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** June 19, 2012

Analyte Comments:

QC Batch: MSV/46221

B: Analyte was detected in the associated method blank.

- GW-074926-060712-CB-MW-1 (Lab ID: 60122944001)
  - Toluene
- GW-074926-060712-CB-MW-2 (Lab ID: 60122944002)
  - Toluene
- GW-074926-060712-CB-MW-3 (Lab ID: 60122944003)
  - Toluene

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

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

**Sample:** GW-074926-060712-CB-MW-1 **Lab ID:** 60122944001 **Collected:** 06/07/12 10:00 **Received:** 06/08/12 08:45 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	<b>21400</b>	ug/L	50.0	17.2	1	06/15/12 15:55	06/18/12 12:05	7439-89-6	
Manganese, Dissolved	<b>914</b>	ug/L	5.0	0.60	1	06/15/12 15:55	06/18/12 12:05	7439-96-5	B
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	<b>1770</b>	ug/L	50.0	2.5	50		06/13/12 01:24	71-43-2	
Ethylbenzene	<b>182</b>	ug/L	50.0	4.0	50		06/13/12 01:24	100-41-4	
Toluene	<b>127</b>	ug/L	50.0	3.5	50		06/13/12 01:24	108-88-3	B
Xylene (Total)	<b>633</b>	ug/L	150	9.0	50		06/13/12 01:24	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	86-112		50		06/13/12 01:24	1868-53-7	
Toluene-d8 (S)	99	%	90-110		50		06/13/12 01:24	2037-26-5	
4-Bromofluorobenzene (S)	102	%	87-113		50		06/13/12 01:24	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119		50		06/13/12 01:24	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	50		06/13/12 01:24		



## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

**Sample:** GW-074926-060712-CB-MW-2 **Lab ID:** 60122944002 **Collected:** 06/07/12 09:40 **Received:** 06/08/12 08:45 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	82.2	ug/L	50.0	17.2	1	06/18/12 16:40	06/19/12 10:28	7439-89-6	
Manganese, Dissolved	5.2	ug/L	5.0	0.60	1	06/18/12 16:40	06/19/12 10:28	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.050	1		06/13/12 01:38	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.080	1		06/13/12 01:38	100-41-4	
Toluene	ND	ug/L	1.0	0.070	1		06/13/12 01:38	108-88-3	B
Xylene (Total)	ND	ug/L	3.0	0.18	1		06/13/12 01:38	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	101	%	86-112		1		06/13/12 01:38	1868-53-7	
Toluene-d8 (S)	103	%	90-110		1		06/13/12 01:38	2037-26-5	
4-Bromofluorobenzene (S)	107	%	87-113		1		06/13/12 01:38	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		06/13/12 01:38	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		06/13/12 01:38		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

**Sample:** GW-074926-060712-CB-MW-3 **Lab ID:** 60122944003 Collected: 06/07/12 09:50 Received: 06/08/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	ND	ug/L	50.0	17.2	1	06/15/12 15:55	06/18/12 12:10	7439-89-6	
Manganese, Dissolved	ND	ug/L	5.0	0.60	1	06/15/12 15:55	06/18/12 12:10	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.050	1		06/13/12 01:53	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.080	1		06/13/12 01:53	100-41-4	
Toluene	ND	ug/L	1.0	0.070	1		06/13/12 01:53	108-88-3	B
Xylene (Total)	ND	ug/L	3.0	0.18	1		06/13/12 01:53	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	100 %		86-112		1		06/13/12 01:53	1868-53-7	
Toluene-d8 (S)	101 %		90-110		1		06/13/12 01:53	2037-26-5	
4-Bromofluorobenzene (S)	102 %		87-113		1		06/13/12 01:53	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		82-119		1		06/13/12 01:53	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		06/13/12 01:53		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

**Sample:** GW-074926-060712-CB-MW-4 **Lab ID:** 60122944004 Collected: 06/07/12 10:15 Received: 06/08/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	2070	ug/L	50.0	17.2	1	06/15/12 15:55	06/18/12 12:12	7439-89-6	
Manganese, Dissolved	4020	ug/L	5.0	0.60	1	06/15/12 15:55	06/18/12 12:12	7439-96-5	B
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	44.0	ug/L	1.0	0.050	1		06/13/12 17:57	71-43-2	
Ethylbenzene	24.5	ug/L	1.0	0.080	1		06/13/12 17:57	100-41-4	
Toluene	ND	ug/L	1.0	0.070	1		06/13/12 17:57	108-88-3	
Xylene (Total)	303	ug/L	3.0	0.18	1		06/13/12 17:57	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	86-112		1		06/13/12 17:57	1868-53-7	
Toluene-d8 (S)	107	%	90-110		1		06/13/12 17:57	2037-26-5	
4-Bromofluorobenzene (S)	103	%	87-113		1		06/13/12 17:57	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	82-119		1		06/13/12 17:57	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		06/13/12 17:57		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

**Sample:** GW-074926-060712-CB-DUP **Lab ID:** 60122944005 **Collected:** 06/07/12 10:05 **Received:** 06/08/12 08:45 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	26.0	ug/L	2.0	0.080	2		06/15/12 02:40	71-43-2	
Ethylbenzene	12.4	ug/L	2.0	0.20	2		06/15/12 02:40	100-41-4	
Toluene	ND	ug/L	2.0	0.20	2		06/15/12 02:40	108-88-3	
Xylene (Total)	155	ug/L	6.0	0.60	2		06/15/12 02:40	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	96	%	86-112		2		06/15/12 02:40	1868-53-7	
Toluene-d8 (S)	103	%	90-110		2		06/15/12 02:40	2037-26-5	
4-Bromofluorobenzene (S)	98	%	87-113		2		06/15/12 02:40	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	82-119		2		06/15/12 02:40	17060-07-0	
Preservation pH	1.0		1.0	0.10	2		06/15/12 02:40		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

**Sample:** GW-074926-060712-CB-DW34    **Lab ID:** 60122944006    Collected: 06/07/12 11:20    Received: 06/08/12 08:45    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.050	1		06/13/12 18:26	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.080	1		06/13/12 18:26	100-41-4	
Toluene	ND	ug/L	1.0	0.070	1		06/13/12 18:26	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.12	1		06/14/12 19:43	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	100 %		86-112		1		06/13/12 18:26	1868-53-7	
Toluene-d8 (S)	100 %		90-110		1		06/13/12 18:26	2037-26-5	
4-Bromofluorobenzene (S)	105 %		87-113		1		06/13/12 18:26	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		82-119		1		06/13/12 18:26	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		06/13/12 18:26		

## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

Sample: TRIP BLANK		Lab ID: 60122944007		Collected: 06/07/12 00:00		Received: 06/08/12 08:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>		Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	0.050	1		06/13/12 16:17	71-43-2	
Ethylbenzene	ND ug/L		1.0	0.080	1		06/13/12 16:17	100-41-4	
Toluene	ND ug/L		1.0	0.070	1		06/13/12 16:17	108-88-3	
Xylene (Total)	ND ug/L		3.0	0.18	1		06/13/12 16:17	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	102 %		86-112		1		06/13/12 16:17	1868-53-7	
Toluene-d8 (S)	99 %		90-110		1		06/13/12 16:17	2037-26-5	
4-Bromofluorobenzene (S)	102 %		87-113		1		06/13/12 16:17	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		82-119		1		06/13/12 16:17	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		06/13/12 16:17		

## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

QC Batch: MPRP/18387 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60122944001, 60122944003, 60122944004

METHOD BLANK: 1014959 Matrix: Water

Associated Lab Samples: 60122944001, 60122944003, 60122944004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	06/18/12 11:47	
Manganese, Dissolved	ug/L	11.2	5.0	06/18/12 11:47	

LABORATORY CONTROL SAMPLE: 1014960

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	10100	101	80-120	
Manganese, Dissolved	ug/L	1000	934	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1014961 1014962

Parameter	Units	60122912001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	20.1J	10000	10000	9880	9980	99	100	75-125	1	20	
Manganese, Dissolved	ug/L	886	1000	1000	1770	1790	88	91	75-125	1	20	



## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

QC Batch: MPRP/18413

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 60122944002

METHOD BLANK: 1016073

Matrix: Water

Associated Lab Samples: 60122944002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	06/19/12 10:24	
Manganese, Dissolved	ug/L	ND	5.0	06/19/12 10:24	

LABORATORY CONTROL SAMPLE: 1016074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9640	96	80-120	
Manganese, Dissolved	ug/L	1000	969	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1016075

1016076

Parameter	Units	60122948001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	30.7J	10000	10000	8200	9630	82	96	75-125	16	20	
Manganese, Dissolved	ug/L	17.5	1000	1000	819	951	80	93	75-125	15	20	

## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

QC Batch: MSV/46221

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60122944001, 60122944002, 60122944003

METHOD BLANK: 1012036

Matrix: Water

Associated Lab Samples: 60122944001, 60122944002, 60122944003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/12/12 21:06	
Ethylbenzene	ug/L	ND	1.0	06/12/12 21:06	
Toluene	ug/L	ND	1.0	06/12/12 21:06	
Xylene (Total)	ug/L	ND	3.0	06/12/12 21:06	
1,2-Dichloroethane-d4 (S)	%	99	82-119	06/12/12 21:06	
4-Bromofluorobenzene (S)	%	100	87-113	06/12/12 21:06	
Dibromofluoromethane (S)	%	99	86-112	06/12/12 21:06	
Toluene-d8 (S)	%	100	90-110	06/12/12 21:06	

LABORATORY CONTROL SAMPLE: 1012037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.6	103	82-117	
Ethylbenzene	ug/L	20	20.2	101	79-121	
Toluene	ug/L	20	20.9	105	80-120	
Xylene (Total)	ug/L	60	61.2	102	79-120	
1,2-Dichloroethane-d4 (S)	%			105	82-119	
4-Bromofluorobenzene (S)	%			103	87-113	
Dibromofluoromethane (S)	%			103	86-112	
Toluene-d8 (S)	%			103	90-110	

## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

QC Batch: MSV/46307

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60122944004, 60122944006, 60122944007

METHOD BLANK: 1013449

Matrix: Water

Associated Lab Samples: 60122944004, 60122944006, 60122944007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/13/12 15:34	
Ethylbenzene	ug/L	ND	1.0	06/13/12 15:34	
Toluene	ug/L	ND	1.0	06/13/12 15:34	
Xylene (Total)	ug/L	ND	3.0	06/13/12 15:34	
1,2-Dichloroethane-d4 (S)	%	98	82-119	06/13/12 15:34	
4-Bromofluorobenzene (S)	%	101	87-113	06/13/12 15:34	
Dibromofluoromethane (S)	%	99	86-112	06/13/12 15:34	
Toluene-d8 (S)	%	101	90-110	06/13/12 15:34	

LABORATORY CONTROL SAMPLE: 1013450

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.8	104	82-117	
Ethylbenzene	ug/L	20	20.0	100	79-121	
Toluene	ug/L	20	20.7	103	80-120	
Xylene (Total)	ug/L	60	61.9	103	79-120	
1,2-Dichloroethane-d4 (S)	%			102	82-119	
4-Bromofluorobenzene (S)	%			102	87-113	
Dibromofluoromethane (S)	%			103	86-112	
Toluene-d8 (S)	%			98	90-110	

## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

QC Batch: MSV/46343

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60122944006

METHOD BLANK: 1014000

Matrix: Water

Associated Lab Samples: 60122944006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Xylene (Total)	ug/L	ND	3.0	06/14/12 18:22	
1,2-Dichloroethane-d4 (S)	%	85	82-119	06/14/12 18:22	
4-Bromofluorobenzene (S)	%	103	87-113	06/14/12 18:22	
Dibromofluoromethane (S)	%	101	86-112	06/14/12 18:22	
Toluene-d8 (S)	%	98	90-110	06/14/12 18:22	

LABORATORY CONTROL SAMPLE: 1014001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	60	67.9	113	79-120	
1,2-Dichloroethane-d4 (S)	%			86	82-119	
4-Bromofluorobenzene (S)	%			102	87-113	
Dibromofluoromethane (S)	%			104	86-112	
Toluene-d8 (S)	%			98	90-110	

## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1  
Pace Project No.: 60122944

QC Batch:	MSV/46346	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60122944005		

METHOD BLANK: 1014006 Matrix: Water  
Associated Lab Samples: 60122944005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/14/12 21:38	
Ethylbenzene	ug/L	ND	1.0	06/14/12 21:38	
Toluene	ug/L	ND	1.0	06/14/12 21:38	
Xylene (Total)	ug/L	ND	3.0	06/14/12 21:38	
1,2-Dichloroethane-d4 (S)	%	95	82-119	06/14/12 21:38	
4-Bromofluorobenzene (S)	%	100	87-113	06/14/12 21:38	
Dibromofluoromethane (S)	%	97	86-112	06/14/12 21:38	
Toluene-d8 (S)	%	101	90-110	06/14/12 21:38	

LABORATORY CONTROL SAMPLE: 1014007

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.0	100	82-117	
Ethylbenzene	ug/L	20	18.3	91	79-121	
Toluene	ug/L	20	19.1	96	80-120	
Xylene (Total)	ug/L	60	55.4	92	79-120	
1,2-Dichloroethane-d4 (S)	%			93	82-119	
4-Bromofluorobenzene (S)	%			99	87-113	
Dibromofluoromethane (S)	%			96	86-112	
Toluene-d8 (S)	%			100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1014008 1014009

Parameter	Units	60122831003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Benzene	ug/L	ND	100	100	95.1	111	92	109	58-139	16	21
Ethylbenzene	ug/L	29.9	100	100	113	127	83	97	56-138	12	19
Toluene	ug/L	ND	100	100	89.2	106	85	102	59-140	17	19
Xylene (Total)	ug/L	ND	300	300	249	295	83	98	52-146	17	19
1,2-Dichloroethane-d4 (S)	%						96	96	82-119		
4-Bromofluorobenzene (S)	%						101	102	87-113		
Dibromofluoromethane (S)	%						99	98	86-112		
Toluene-d8 (S)	%						101	100	90-110		
Preservation pH		1.0			1.0	1.0				0	

## QUALIFIERS

Project: FLORA VISTA NO 1  
Pace Project No.: 60122944

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/46221

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

Batch: MSV/46307

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

Batch: MSV/46343

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

Batch: MSV/46346

[1]

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FLORA VISTA NO 1

Pace Project No.: 60122944

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60122944001	GW-074926-060712-CB-MW-1	EPA 3010	MPRP/18387	EPA 6010	ICP/15405
60122944002	GW-074926-060712-CB-MW-2	EPA 3010	MPRP/18413	EPA 6010	ICP/15419
60122944003	GW-074926-060712-CB-MW-3	EPA 3010	MPRP/18387	EPA 6010	ICP/15405
60122944004	GW-074926-060712-CB-MW-4	EPA 3010	MPRP/18387	EPA 6010	ICP/15405
60122944001	GW-074926-060712-CB-MW-1	EPA 8260	MSV/46221		
60122944002	GW-074926-060712-CB-MW-2	EPA 8260	MSV/46221		
60122944003	GW-074926-060712-CB-MW-3	EPA 8260	MSV/46221		
60122944004	GW-074926-060712-CB-MW-4	EPA 8260	MSV/46307		
60122944005	GW-074926-060712-CB-DUP	EPA 8260	MSV/46346		
60122944006	GW-074926-060712-CB-DW34	EPA 8260	MSV/46307		
60122944006	GW-074926-060712-CB-DW34	EPA 8260	MSV/46343		
60122944007	TRIP BLANK	EPA 8260	MSV/46307		





# Sample Condition Upon Receipt

Client Name: CRA NM

Project # 60122944

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 9993 9001 6621 Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other

Thermometer Used: (T-191) / T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2-2

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: JWS 6/6/12 1150

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>water</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>mlh</u> Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>052112-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution:

Copy COC to Client?

Y / (N)

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: AAE

Date: 6/11/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



August 03, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: FLORA VISTA NO 1 074926  
Pace Project No.: 60126059

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on July 28, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Page 1 of 10

## CERTIFICATIONS

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60126059001	GW-074926-072712-JK-DW-17	Water	07/27/12 09:00	07/28/12 08:30
60126059002	GW-074926-072712-JK-DW-DUP	Water	07/27/12 09:00	07/28/12 08:30

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60126059001	GW-074926-072712-JK-DW-17	EPA 5030B/8260	JDM	9
60126059002	GW-074926-072712-JK-DW-DUP	EPA 5030B/8260	JDM	9

## REPORT OF LABORATORY ANALYSIS

Page 4 of 10

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## PROJECT NARRATIVE

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

---

**Method:** EPA 5030B/8260

**Description:** 8260 MSV

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** August 03, 2012

**General Information:**

2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/47455

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

Page 5 of 10

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## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

**Sample:** GW-074926-072712-JK-DW-17 **Lab ID:** 60126059001 **Collected:** 07/27/12 09:00 **Received:** 07/28/12 08:30 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.070	1		08/01/12 12:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.078	1		08/01/12 12:24	100-41-4	
Toluene	ND	ug/L	1.0	0.064	1		08/01/12 12:24	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.15	1		08/01/12 12:24	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95 %		80-120		1		08/01/12 12:24	460-00-4	
Dibromofluoromethane (S)	97 %		80-120		1		08/01/12 12:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %		80-120		1		08/01/12 12:24	17060-07-0	
Toluene-d8 (S)	91 %		80-120		1		08/01/12 12:24	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		08/01/12 12:24		



## ANALYTICAL RESULTS

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

**Sample:** GW-074926-072712-JK-DW-DUP **Lab ID:** 60126059002 **Collected:** 07/27/12 09:00 **Received:** 07/28/12 08:30 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.070	1		08/01/12 12:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.078	1		08/01/12 12:40	100-41-4	
Toluene	ND	ug/L	1.0	0.064	1		08/01/12 12:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.15	1		08/01/12 12:40	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99 %		80-120		1		08/01/12 12:40	460-00-4	
Dibromofluoromethane (S)	99 %		80-120		1		08/01/12 12:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	106 %		80-120		1		08/01/12 12:40	17060-07-0	
Toluene-d8 (S)	101 %		80-120		1		08/01/12 12:40	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		08/01/12 12:40		

## QUALITY CONTROL DATA

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

QC Batch:	MSV/47455	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Samples:	60126059001, 60126059002		

METHOD BLANK: 1037919 Matrix: Water

Associated Lab Samples: 60126059001, 60126059002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	08/01/12 10:35	
Ethylbenzene	ug/L	ND	1.0	08/01/12 10:35	
Toluene	ug/L	ND	1.0	08/01/12 10:35	
Xylene (Total)	ug/L	ND	3.0	08/01/12 10:35	
1,2-Dichloroethane-d4 (S)	%	106	80-120	08/01/12 10:35	
4-Bromofluorobenzene (S)	%	97	80-120	08/01/12 10:35	
Dibromofluoromethane (S)	%	104	80-120	08/01/12 10:35	
Toluene-d8 (S)	%	98	80-120	08/01/12 10:35	

LABORATORY CONTROL SAMPLE: 1037920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.2	91	74-123	
Ethylbenzene	ug/L	20	21.0	105	76-123	
Toluene	ug/L	20	18.1	90	75-123	
Xylene (Total)	ug/L	60	57.1	95	76-123	
1,2-Dichloroethane-d4 (S)	%			112	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Dibromofluoromethane (S)	%			105	80-120	
Toluene-d8 (S)	%			95	80-120	

## QUALIFIERS

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/47455

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

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FLORA VISTA NO 1 074926

Pace Project No.: 60126059

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60126059001	GW-074926-072712-JK-DW-17	EPA 5030B/8260	MSV/47455		
60126059002	GW-074926-072712-JK-DW-DUP	EPA 5030B/8260	MSV/47455		



CONESTOGA-ROVERS  
& ASSOCIATES

# CHAIN OF CUSTODY RECORD

COC NO.: 32506

PAGE 1 OF 1

Address:

Phone:

Fax:

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 074926			Laboratory Name: PACE ANALYTICAL			Lab Location: 9608 LORIER BLVD NW			SSOW ID:		
Project Name: FLORA VISRA 1			Lab Contact:			Lab Quote No: 450962902			Cooler No:		
Project Location: FLORA VISRA, NM			SAMPLE TYPE			CONTAINER QUANTITY & PRESERVATION			ANALYSIS REQUESTED (See Back of COC for Definitions)		
Chemistry Contact:			Matrix Code			Unpreserved			Hydrochloric Acid (HCl)		
Sampler(s): SKIRCHNER			Grab (g) or Comp (c)			Nitric Acid (HNO <sub>3</sub> )			Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )		
			Sodium Hydroxide (NaOH)			Methanol/Water (Soil)			EnCores 3x5-g, 1x25-g		
			Other:			Total Containers/Sample			MS/MSD Request		
Item			DATE (mm/dd/yyyy)			TIME (hh:mm)			COMMENTS/SPECIAL INSTRUCTIONS:		
1 GW-074926-07412-JK-DW-17			0700			0900			a1		
2 GW-074926-07412-JK-DW-21			0900			0900			a2		
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

RELINQUISHED BY John M. Skirchner		DATE 7-28-12		COMPANY CRA		RECEIVED BY E. Brackett		DATE 7/28/12		TIME 0830	
1											
2											
3											
4											
5											

Notes/ Special Requirements:

Total Number of Containers:

All Samples in Cooler must be on COC





# Sample Condition Upon Receipt – ESI Tech Specs

Client Name OP CRA NM

Project #: 6012659

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Optional

Proj Due Date: 8/9

Proj Name:

Tracking #: 800695183291

Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue ☐ None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 4.0

Date and initials of person examining contents: 7/28/12 AB

Temperature should be above freezing to 6°C

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

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution: Christine Matthews

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

Start: 0915 Start:

End: 0917 End:

Temp: Temp:

Project Manager Review: AAI

Date: 7/30/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

October 04, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: 074926 FLORA VISTA NO 1  
Pace Project No.: 60129621

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Cassie Brown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

---

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60129621001	GW-074926-091912-JP-MW-1	Water	09/19/12 14:25	09/22/12 08:50
60129621002	GW-074926-091912-JP-MW-2	Water	09/19/12 14:30	09/22/12 08:50
60129621003	GW-074926-091912-JP-MW-3	Water	09/19/12 16:30	09/22/12 08:50
60129621004	GW-074926-091912-JP-MW-4	Water	09/19/12 16:20	09/22/12 08:50
60129621005	GW-074926-091912-JP-MW-DUP	Water	09/19/12 16:25	09/22/12 08:50
60129621006	TB-074926-091912	Water	09/19/12 00:00	09/22/12 08:50

## REPORT OF LABORATORY ANALYSIS

Page 3 of 16

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## SAMPLE ANALYTE COUNT

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60129621001	GW-074926-091912-JP-MW-1	EPA 6010	SMW	2
		EPA 8260	PRG	9
60129621002	GW-074926-091912-JP-MW-2	EPA 6010	SMW	2
		EPA 8260	PRG	9
60129621003	GW-074926-091912-JP-MW-3	EPA 6010	SMW	2
		EPA 8260	PRG	9
60129621004	GW-074926-091912-JP-MW-4	EPA 6010	SMW	2
		EPA 8260	PRG	9
60129621005	GW-074926-091912-JP-MW-DUP	EPA 8260	PRG	9
60129621006	TB-074926-091912	EPA 8260	PRG	9

## REPORT OF LABORATORY ANALYSIS

Page 4 of 16

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## PROJECT NARRATIVE

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

---

**Method:** EPA 6010

**Description:** 6010 MET ICP, Dissolved

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** October 04, 2012

**General Information:**

4 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

Page 5 of 16

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## PROJECT NARRATIVE

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** October 04, 2012

**General Information:**

6 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/48823

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

Page 6 of 16

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## ANALYTICAL RESULTS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

**Sample:** GW-074926-091912-JP-MW-1 **Lab ID:** 60129621001 **Collected:** 09/19/12 14:25 **Received:** 09/22/12 08:50 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	19000	ug/L	50.0	17.2	1	09/24/12 13:45	09/26/12 15:17	7439-89-6	
Manganese, Dissolved	0.86	mg/L	0.0050	0.00060	1	09/24/12 13:45	09/26/12 15:17	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	1520	ug/L	20.0	2.0	20		10/01/12 03:44	71-43-2	
Ethylbenzene	414	ug/L	20.0	4.6	20		10/01/12 03:44	100-41-4	
Toluene	ND	ug/L	20.0	3.0	20		10/01/12 03:44	108-88-3	
Xylene (Total)	2490	ug/L	60.0	8.2	20		10/01/12 03:44	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	113	%	80-120		20		10/01/12 03:44	1868-53-7	
Toluene-d8 (S)	106	%	80-120		20		10/01/12 03:44	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120		20		10/01/12 03:44	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	80-120		20		10/01/12 03:44	17060-07-0	
Preservation pH	1.0		1.0	0.10	20		10/01/12 03:44		

## ANALYTICAL RESULTS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

**Sample:** GW-074926-091912-JP-MW-2    **Lab ID:** 60129621002    Collected: 09/19/12 14:30    Received: 09/22/12 08:50    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	ND	ug/L	50.0	17.2	1	09/24/12 13:45	09/26/12 15:27	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.0050	0.00060	1	09/24/12 13:45	09/26/12 15:27	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		10/01/12 03:59	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		10/01/12 03:59	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		10/01/12 03:59	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		10/01/12 03:59	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	114	%	80-120		1		10/01/12 03:59	1868-53-7	
Toluene-d8 (S)	105	%	80-120		1		10/01/12 03:59	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		10/01/12 03:59	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	80-120		1		10/01/12 03:59	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		10/01/12 03:59		

## ANALYTICAL RESULTS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

**Sample:** GW-074926-091912-JP-MW-3 **Lab ID:** 60129621003 **Collected:** 09/19/12 16:30 **Received:** 09/22/12 08:50 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	ND	ug/L	50.0	17.2	1	09/24/12 13:45	09/26/12 15:30	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.0050	0.00060	1	09/24/12 13:45	09/26/12 15:30	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		10/01/12 04:14	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		10/01/12 04:14	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		10/01/12 04:14	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		10/01/12 04:14	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	109 %		80-120		1		10/01/12 04:14	1868-53-7	
Toluene-d8 (S)	108 %		80-120		1		10/01/12 04:14	2037-26-5	
4-Bromofluorobenzene (S)	96 %		80-120		1		10/01/12 04:14	460-00-4	
1,2-Dichloroethane-d4 (S)	115 %		80-120		1		10/01/12 04:14	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		10/01/12 04:14		

## ANALYTICAL RESULTS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

**Sample:** GW-074926-091912-JP-MW-4 **Lab ID:** 60129621004 **Collected:** 09/19/12 16:20 **Received:** 09/22/12 08:50 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	1930	ug/L	250	86.0	5	09/24/12 13:45	09/28/12 11:31	7439-89-6	
Manganese, Dissolved	4.5	mg/L	0.0050	0.00060	1	09/24/12 13:45	09/26/12 15:34	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	2.9	ug/L	1.0	0.098	1		10/01/12 04:29	71-43-2	
Ethylbenzene	4.8	ug/L	1.0	0.23	1		10/01/12 04:29	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		10/01/12 04:29	108-88-3	
Xylene (Total)	57.6	ug/L	3.0	0.41	1		10/01/12 04:29	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	110	%	80-120		1		10/01/12 04:29	1868-53-7	
Toluene-d8 (S)	114	%	80-120		1		10/01/12 04:29	2037-26-5	
4-Bromofluorobenzene (S)	109	%	80-120		1		10/01/12 04:29	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	80-120		1		10/01/12 04:29	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		10/01/12 04:29		



## ANALYTICAL RESULTS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

**Sample:** GW-074926-091912-JP-MW-DUP **Lab ID:** 60129621005 Collected: 09/19/12 16:25 Received: 09/22/12 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	2.8	ug/L	1.0	0.098	1		10/01/12 04:43	71-43-2	
Ethylbenzene	4.5	ug/L	1.0	0.23	1		10/01/12 04:43	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		10/01/12 04:43	108-88-3	
Xylene (Total)	55.1	ug/L	3.0	0.41	1		10/01/12 04:43	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	109	%	80-120		1		10/01/12 04:43	1868-53-7	
Toluene-d8 (S)	113	%	80-120		1		10/01/12 04:43	2037-26-5	
4-Bromofluorobenzene (S)	109	%	80-120		1		10/01/12 04:43	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	80-120		1		10/01/12 04:43	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		10/01/12 04:43		

## ANALYTICAL RESULTS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

Sample: TB-074926-091912		Lab ID: 60129621006		Collected: 09/19/12 00:00		Received: 09/22/12 08:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>		Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	0.098	1		10/01/12 04:58	71-43-2	
Ethylbenzene	ND ug/L		1.0	0.23	1		10/01/12 04:58	100-41-4	
Toluene	ND ug/L		1.0	0.15	1		10/01/12 04:58	108-88-3	
Xylene (Total)	ND ug/L		3.0	0.41	1		10/01/12 04:58	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	109 %		80-120		1		10/01/12 04:58	1868-53-7	
Toluene-d8 (S)	106 %		80-120		1		10/01/12 04:58	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120		1		10/01/12 04:58	460-00-4	
1,2-Dichloroethane-d4 (S)	114 %		80-120		1		10/01/12 04:58	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		10/01/12 04:58		

## QUALITY CONTROL DATA

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

QC Batch: MPRP/19623 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60129621001, 60129621002, 60129621003, 60129621004

METHOD BLANK: 1066229 Matrix: Water

Associated Lab Samples: 60129621001, 60129621002, 60129621003, 60129621004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	09/26/12 14:46	
Manganese, Dissolved	mg/L	ND	0.0050	09/26/12 14:46	

LABORATORY CONTROL SAMPLE: 1066230

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9850	98	80-120	
Manganese, Dissolved	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1066231 1066232

Parameter	Units	60129627003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	ND	10000	10000	9560	9630	96	96	75-125	1	20	
Manganese, Dissolved	mg/L	0.054	1	1	1.1	1.1	100	101	75-125	0	20	

## QUALITY CONTROL DATA

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

QC Batch: MSV/48823

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60129621001, 60129621002, 60129621003, 60129621004, 60129621005, 60129621006

METHOD BLANK: 1069198

Matrix: Water

Associated Lab Samples: 60129621001, 60129621002, 60129621003, 60129621004, 60129621005, 60129621006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/01/12 03:00	
Ethylbenzene	ug/L	ND	1.0	10/01/12 03:00	
Toluene	ug/L	ND	1.0	10/01/12 03:00	
Xylene (Total)	ug/L	ND	3.0	10/01/12 03:00	
1,2-Dichloroethane-d4 (S)	%	118	80-120	10/01/12 03:00	
4-Bromofluorobenzene (S)	%	98	80-120	10/01/12 03:00	
Dibromofluoromethane (S)	%	111	80-120	10/01/12 03:00	
Toluene-d8 (S)	%	105	80-120	10/01/12 03:00	

LABORATORY CONTROL SAMPLE: 1069199

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.8	94	74-123	
Ethylbenzene	ug/L	20	19.0	95	76-123	
Toluene	ug/L	20	18.4	92	75-123	
Xylene (Total)	ug/L	60	56.5	94	76-123	
1,2-Dichloroethane-d4 (S)	%			114	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Dibromofluoromethane (S)	%			112	80-120	
Toluene-d8 (S)	%			101	80-120	

## QUALIFIERS

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/48823

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

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 074926 FLORA VISTA NO 1

Pace Project No.: 60129621

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60129621001	GW-074926-091912-JP-MW-1	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129621002	GW-074926-091912-JP-MW-2	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129621003	GW-074926-091912-JP-MW-3	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129621004	GW-074926-091912-JP-MW-4	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129621001	GW-074926-091912-JP-MW-1	EPA 8260	MSV/48823		
60129621002	GW-074926-091912-JP-MW-2	EPA 8260	MSV/48823		
60129621003	GW-074926-091912-JP-MW-3	EPA 8260	MSV/48823		
60129621004	GW-074926-091912-JP-MW-4	EPA 8260	MSV/48823		
60129621005	GW-074926-091912-JP-MW-DUP	EPA 8260	MSV/48823		
60129621006	TB-074926-091912	EPA 8260	MSV/48823		



## CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1[illegible][illegible]

Pace Package 17 of 18



## Sample Condition Upon Receipt

Client Name: CRA NMProject # 60129621Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☒ OtherTracking #: 8006 9527 2610 Pace Shipping Label Used? ☐ Yes ☒ NoCustody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional
Proj. Due Date: <u>6/04</u>
Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☒ Other ZPLCThermometer Used: T-191 / T-194Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begunCooler Temperature: 2.7

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 9-22-12 BA

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>080612-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: _____

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: PAFDate: 9/24/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



December 27, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: Flora Vista No. 1  
Pace Project No.: 60135440

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Cassie Brown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Pace Package 1 of 20

## CERTIFICATIONS

Project: Flora Vista No. 1

Pace Project No.: 60135440

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### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Flora Vista No. 1

Pace Project No.: 60135440

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60135440001	GW-074926-121312-CM-MW-1	Water	12/13/12 10:55	12/14/12 08:30
60135440002	GW-074926-121312-CM-MW-2	Water	12/13/12 10:45	12/14/12 08:30
60135440003	GW-074926-121312-CM-MW-3	Water	12/13/12 10:05	12/14/12 08:30
60135440004	GW-074926-121312-CM-MW-4	Water	12/13/12 10:25	12/14/12 08:30
60135440005	GW-074926-121312-CM-DUP	Water	12/13/12 10:30	12/14/12 08:30
60135440006	TB-074926-121312-CM-001	Water	12/13/12 14:30	12/14/12 08:30

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Flora Vista No. 1

Pace Project No.: 60135440

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60135440001	GW-074926-121312-CM-MW-1	EPA 6010	JGP	2
		EPA 8260	PRG	9
60135440002	GW-074926-121312-CM-MW-2	EPA 6010	JGP	2
		EPA 8260	PRG	9
60135440003	GW-074926-121312-CM-MW-3	EPA 6010	JGP	2
		EPA 8260	PRG	9
60135440004	GW-074926-121312-CM-MW-4	EPA 6010	JGP	2
		EPA 8260	PRG	9
60135440005	GW-074926-121312-CM-DUP	EPA 8260	JTK, SDR	9
60135440006	TB-074926-121312-CM-001	EPA 8260	JTK	9

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Flora Vista No. 1

Pace Project No.: 60135440

---

**Method:** EPA 6010

**Description:** 6010 MET ICP, Dissolved

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** December 27, 2012

**General Information:**

4 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Flora Vista No. 1

Pace Project No.: 60135440

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** December 27, 2012

**General Information:**

6 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/50943

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

QC Batch: MSV/50967

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

QC Batch: MSV/50978

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Flora Vista No. 1

Pace Project No.: 60135440

**Sample:** GW-074926-121312-CM-MW-1    **Lab ID:** 60135440001    Collected: 12/13/12 10:55    Received: 12/14/12 08:30    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	<b>23800</b>	ug/L	50.0	17.2	1	12/19/12 14:45	12/26/12 16:41	7439-89-6	
Manganese, Dissolved	<b>0.75</b>	mg/L	0.0050	0.00060	1	12/19/12 14:45	12/26/12 16:41	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	<b>2020</b>	ug/L	25.0	2.4	25		12/22/12 06:57	71-43-2	
Ethylbenzene	<b>809</b>	ug/L	25.0	5.8	25		12/22/12 06:57	100-41-4	
Toluene	ND	ug/L	25.0	3.8	25		12/22/12 06:57	108-88-3	
Xylene (Total)	<b>5020</b>	ug/L	75.0	10.2	25		12/22/12 06:57	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	96	%	80-120		25		12/22/12 06:57	1868-53-7	
Toluene-d8 (S)	107	%	80-120		25		12/22/12 06:57	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		25		12/22/12 06:57	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		25		12/22/12 06:57	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	25		12/22/12 06:57		

## ANALYTICAL RESULTS

Project: Flora Vista No. 1

Pace Project No.: 60135440

**Sample:** GW-074926-121312-CM-MW-2    **Lab ID:** 60135440002    Collected: 12/13/12 10:45    Received: 12/14/12 08:30    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	ND	ug/L	50.0	17.2	1	12/19/12 14:45	12/26/12 16:44	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.0050	0.00060	1	12/19/12 14:45	12/26/12 16:44	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		12/22/12 07:11	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		12/22/12 07:11	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		12/22/12 07:11	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		12/22/12 07:11	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	99 %		80-120		1		12/22/12 07:11	1868-53-7	
Toluene-d8 (S)	105 %		80-120		1		12/22/12 07:11	2037-26-5	
4-Bromofluorobenzene (S)	100 %		80-120		1		12/22/12 07:11	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		80-120		1		12/22/12 07:11	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		12/22/12 07:11		



## ANALYTICAL RESULTS

Project: Flora Vista No. 1

Pace Project No.: 60135440

**Sample:** GW-074926-121312-CM-MW-3    **Lab ID:** 60135440003    Collected: 12/13/12 10:05    Received: 12/14/12 08:30    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	60.5	ug/L	50.0	17.2	1	12/19/12 14:45	12/26/12 16:47	7439-89-6	
Manganese, Dissolved	0.026	mg/L	0.0050	0.00060	1	12/19/12 14:45	12/26/12 16:47	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		12/22/12 07:26	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		12/22/12 07:26	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		12/22/12 07:26	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		12/22/12 07:26	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	105	%	80-120		1		12/22/12 07:26	1868-53-7	
Toluene-d8 (S)	102	%	80-120		1		12/22/12 07:26	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1		12/22/12 07:26	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		12/22/12 07:26	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		12/22/12 07:26		

## ANALYTICAL RESULTS

Project: Flora Vista No. 1

Pace Project No.: 60135440

**Sample:** GW-074926-121312-CM-MW-4 **Lab ID:** 60135440004 Collected: 12/13/12 10:25 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	2920	ug/L	50.0	17.2	1	12/19/12 14:45	12/26/12 16:51	7439-89-6	
Manganese, Dissolved	4.9	mg/L	0.0050	0.00060	1	12/19/12 14:45	12/26/12 16:51	7439-96-5	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	94.1	ug/L	2.0	0.20	2		12/22/12 07:40	71-43-2	
Ethylbenzene	39.9	ug/L	2.0	0.46	2		12/22/12 07:40	100-41-4	
Toluene	ND	ug/L	2.0	0.30	2		12/22/12 07:40	108-88-3	
Xylene (Total)	385	ug/L	6.0	0.82	2		12/22/12 07:40	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	80-120		2		12/22/12 07:40	1868-53-7	
Toluene-d8 (S)	107	%	80-120		2		12/22/12 07:40	2037-26-5	
4-Bromofluorobenzene (S)	111	%	80-120		2		12/22/12 07:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		2		12/22/12 07:40	17060-07-0	
Preservation pH	1.0		1.0	0.10	2		12/22/12 07:40		

## ANALYTICAL RESULTS

Project: Flora Vista No. 1

Pace Project No.: 60135440

**Sample:** GW-074926-121312-CM-DUP **Lab ID:** 60135440005 Collected: 12/13/12 10:30 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	<b>197</b>	ug/L	1.0	0.12	1		12/21/12 01:19	71-43-2	
Ethylbenzene	<b>71.2</b>	ug/L	1.0	0.060	1		12/21/12 01:19	100-41-4	
Toluene	ND	ug/L	1.0	0.054	1		12/21/12 01:19	108-88-3	
Xylene (Total)	<b>550</b>	ug/L	15.0	0.60	5		12/21/12 20:18	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	99	%	80-120		1		12/21/12 01:19	1868-53-7	
Toluene-d8 (S)	113	%	80-120		1		12/21/12 01:19	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120		1		12/21/12 01:19	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		12/21/12 01:19	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		12/21/12 01:19		

## ANALYTICAL RESULTS

Project: Flora Vista No. 1

Pace Project No.: 60135440

**Sample:** TB-074926-121312-CM-001    **Lab ID:** 60135440006    Collected: 12/13/12 14:30    Received: 12/14/12 08:30    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.12	1		12/21/12 01:35	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.060	1		12/21/12 01:35	100-41-4	
Toluene	ND	ug/L	1.0	0.054	1		12/21/12 01:35	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.67	1		12/21/12 01:35	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	101	%	80-120		1		12/21/12 01:35	1868-53-7	
Toluene-d8 (S)	98	%	80-120		1		12/21/12 01:35	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		12/21/12 01:35	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		12/21/12 01:35	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		12/21/12 01:35		

## QUALITY CONTROL DATA

Project: Flora Vista No. 1

Pace Project No.: 60135440

QC Batch: MPRP/20910 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60135440001, 60135440002, 60135440003, 60135440004

METHOD BLANK: 1117297 Matrix: Water

Associated Lab Samples: 60135440001, 60135440002, 60135440003, 60135440004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	12/26/12 15:46	
Manganese, Dissolved	mg/L	ND	0.0050	12/26/12 15:46	

LABORATORY CONTROL SAMPLE: 1117298

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	8950	90	80-120	
Manganese, Dissolved	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1117299 1117300

Parameter	Units	60135324001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	ND	10000	10000	8880	8820	89	88	75-125	1	20	
Manganese, Dissolved	mg/L	979 ug/L	1	1	2.0	1.9	97	94	75-125	1	20	

## QUALITY CONTROL DATA

Project: Flora Vista No. 1

Pace Project No.: 60135440

QC Batch: MSV/50943

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60135440005, 60135440006

METHOD BLANK: 1117987

Matrix: Water

Associated Lab Samples: 60135440005, 60135440006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/21/12 00:17	
Ethylbenzene	ug/L	ND	1.0	12/21/12 00:17	
Toluene	ug/L	ND	1.0	12/21/12 00:17	
Xylene (Total)	ug/L	ND	3.0	12/21/12 00:17	
1,2-Dichloroethane-d4 (S)	%	101	80-120	12/21/12 00:17	
4-Bromofluorobenzene (S)	%	100	80-120	12/21/12 00:17	
Dibromofluoromethane (S)	%	97	80-120	12/21/12 00:17	
Toluene-d8 (S)	%	101	80-120	12/21/12 00:17	

LABORATORY CONTROL SAMPLE: 1117988

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	74-123	
Ethylbenzene	ug/L	20	20.6	103	76-123	
Toluene	ug/L	20	19.9	99	75-123	
Xylene (Total)	ug/L	60	61.8	103	76-123	
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			95	80-120	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

## QUALITY CONTROL DATA

Project: Flora Vista No. 1

Pace Project No.: 60135440

QC Batch:	MSV/50967	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60135440001, 60135440002, 60135440003, 60135440004		

METHOD BLANK: 1118524 Matrix: Water

Associated Lab Samples: 60135440001, 60135440002, 60135440003, 60135440004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/22/12 05:30	
Ethylbenzene	ug/L	ND	1.0	12/22/12 05:30	
Toluene	ug/L	ND	1.0	12/22/12 05:30	
Xylene (Total)	ug/L	ND	3.0	12/22/12 05:30	
1,2-Dichloroethane-d4 (S)	%	101	80-120	12/22/12 05:30	
4-Bromofluorobenzene (S)	%	100	80-120	12/22/12 05:30	
Dibromofluoromethane (S)	%	96	80-120	12/22/12 05:30	
Toluene-d8 (S)	%	104	80-120	12/22/12 05:30	

LABORATORY CONTROL SAMPLE: 1118525

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.9	105	74-123	
Ethylbenzene	ug/L	20	23.0	115	76-123	
Toluene	ug/L	20	23.1	116	75-123	
Xylene (Total)	ug/L	60	67.8	113	76-123	
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			105	80-120	

## QUALITY CONTROL DATA

Project: Flora Vista No. 1

Pace Project No.: 60135440

QC Batch: MSV/50978

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60135440005

METHOD BLANK: 1118686

Matrix: Water

Associated Lab Samples: 60135440005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Xylene (Total)	ug/L	ND	3.0	12/21/12 20:02	
1,2-Dichloroethane-d4 (S)	%	100	80-120	12/21/12 20:02	
4-Bromofluorobenzene (S)	%	102	80-120	12/21/12 20:02	
Dibromofluoromethane (S)	%	97	80-120	12/21/12 20:02	
Toluene-d8 (S)	%	98	80-120	12/21/12 20:02	

LABORATORY CONTROL SAMPLE: 1118687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	60	64.6	108	76-123	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Dibromofluoromethane (S)	%			97	80-120	
Toluene-d8 (S)	%			99	80-120	



## QUALIFIERS

Project: Flora Vista No. 1

Pace Project No.: 60135440

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/50943

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

Batch: MSV/50967

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

Batch: MSV/50978

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

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Flora Vista No. 1

Pace Project No.: 60135440

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60135440001	GW-074926-121312-CM-MW-1	EPA 3010	MPRP/20910	EPA 6010	ICP/16950
60135440002	GW-074926-121312-CM-MW-2	EPA 3010	MPRP/20910	EPA 6010	ICP/16950
60135440003	GW-074926-121312-CM-MW-3	EPA 3010	MPRP/20910	EPA 6010	ICP/16950
60135440004	GW-074926-121312-CM-MW-4	EPA 3010	MPRP/20910	EPA 6010	ICP/16950
60135440001	GW-074926-121312-CM-MW-1	EPA 8260	MSV/50967		
60135440002	GW-074926-121312-CM-MW-2	EPA 8260	MSV/50967		
60135440003	GW-074926-121312-CM-MW-3	EPA 8260	MSV/50967		
60135440004	GW-074926-121312-CM-MW-4	EPA 8260	MSV/50967		
60135440005	GW-074926-121312-CM-DUP	EPA 8260	MSV/50943		
60135440005	GW-074926-121312-CM-DUP	EPA 8260	MSV/50978		
60135440006	TB-074926-121312-CM-001	EPA 8260	MSV/50943		



# Sample Condition Upon Receipt

WO#: 60135440



60135440

Client Name: CRA NM

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 8022 4452 9929 Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☐

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue ☐ None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 1.6

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JMS 12/14/12 1.45

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Filtered volume received for dissolved tests?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Includes date/time/ID/analyses	Matrix: <u>water</u>	15.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed: <u>JMS</u> Lot # of added preservative:
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	18.
Pace Trip Blank lot # (if purchased):	<u>N/A</u>	19.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	20.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	21. List State:

Client Notification/ Resolution:

Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: 12/14/12

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: APF

Date: 12/14/12

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:				
Company:	CRA	Report To:	Christine Mathews	Attention:	ENFO\$			
Address:	6121 Indian School Rd NE, Ste 200 Albuquerque, NM 87110	Copy To:	Kelly Blanchard, Angela Bown, Cassie Brown	Company Name:				
Email To:	cmathews@croworld.com	Purchase Order No.:		Address:				
Phone: (505)884-0672	Fax: (505)884-4932	Project Name:	Flora Vista No. 1	Pace Quote Reference:				
Requested Due Date/TAT: standard		Project Number:	074926	Pace Project Manager:	Alice Flanagan			
				Pace Profile #:	5514, 5			
<table border="1"> <tr> <td colspan="2"> <b>REGULATORY AGENCY</b>  <input type="checkbox"/> NPDES    <input type="checkbox"/> GROUND WATER    <input type="checkbox"/> DRINKING WATER  <input type="checkbox"/> UST    <input type="checkbox"/> RCRA    <input type="checkbox"/> OTHER _____ </td> <td> <b>Site Location</b>  <b>STATE:</b> NM </td> </tr> </table>						<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____		<b>Site Location</b> <b>STATE:</b> NM
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