

February 9, 2018

Jack Dickey
NMED Petroleum Storage Tank Bureau
121 Tijeras Avenue NE, Suite 1000
Albuquerque, New Mexico 87102

**RE: 1st Semi-Annual Groundwater Monitoring Event Report, Barelás Bridge,
Facility #29854; RID #54**

Dear Mr. Dickey,

INTERA Incorporated (INTERA) is submitting the above-referenced report. This report completes the scope of work for deliverable identification number 3943-1. There was no reduction in scope associated with WPID # 3943. Once a deliverable acceptance letter is received the total amount that will be invoiced including NMGRS is **\$6,331.76** for deliverable 3943-1.

INTERA appreciates the opportunity to work with the New Mexico Environment Department. Please contact Ms. Marcillo (505) 428-0066 / emarcillo@intera.com or Mr. Joseph Tracy (505) 246-1600 ext. 1219 / jtracy@intera.com if you have any questions or require further information.

Sincerely,
INTERA Incorporated



Eileen Marcillo
Project Manager/Hydrologist



Joseph J. Tracy
Principal Geologist

1st SEMI-ANNUAL GROUNDWATER MONITORING REPORT

Barelas Bridge Site, Facility # 29854; Release ID # 54

**800 Bridge Boulevard Southwest
Albuquerque, Bernalillo County, New Mexico**

Prepared for:



New Mexico Environment Department
Petroleum Storage Tank Bureau
121 Tijeras Avenue NE
Albuquerque, New Mexico 87102

Prepared by:



1435 South St. Francis Drive, Unit 103
Santa Fe, New Mexico 87505

February 9, 2018

STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.



Eileen Marcillo
Project Manager
INTERA Incorporated

TABLE OF CONTENTS

STATEMENT OF FAMILIARITY	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	ii
LIST OF TABLES	iii
LIST OF APPENDICES	iii
ACRONYMS AND ABBREVIATIONS.....	iv
1.0 INTRODUCTION.....	1
1.1 Background.....	1
1.2 Scope of Work	2
1.3 Work Plan Deviations	3
1.4 Project Preparation.....	3
2.0 FIELD ACTIVITIES.....	4
2.1 Fluid Level Gauging	4
2.2 Groundwater Sampling	4
2.3 Project Health and Safety, Quality Assurance, and Investigation-Derived Waste	5
3.0 RESULTS	6
3.1 Fluid Level Gauging and Groundwater Flow Direction	6
3.2 Groundwater Quality Parameters.....	6
3.3 Groundwater Analytical Results	6
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	8
4.1 Conclusions.....	8
4.2 Recommendations.....	8
5.0 REFERENCES.....	10

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Potentiometric Surface Map, January 12, 2018
Figure 4	Distribution of Contaminants in Groundwater, January 12, 2018
Figure 5a	Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-4
Figure 5b	Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-4
Figure 6a	Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-7
Figure 6b	Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-7

Figure 7a	Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-8
Figure 7b	Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-8
Figure 8a	Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-9
Figure 8b	Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-9
Figure 9a	Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-2
Figure 9b	Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-2
Figure 10a	Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-5
Figure 10b	Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-5

LIST OF TABLES

Table 1	Fluid Level Measurements
Table 2	Groundwater Quality Parameters
Table 3	Laboratory Analytical Results – Groundwater

LIST OF APPENDICES

Appendix A	Access Agreement
Appendix B	Field Notes and Groundwater Sampling Forms
Appendix C	Historical Fluid Levels and Groundwater Chemistry Data
Appendix D	Laboratory Analytical Report – Groundwater

ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
µg/L	microgram(s) per liter
µS/cm	microSiemens per centimeter
AEHD	Albuquerque Environmental Health Department
amsl	above mean sea level
AS/SVE	air sparge/soil vapor extraction
btoc	below top of casing
EDB	1,2-dibromoethane
EPA	U.S. Environmental Protection Agency
ft	foot or feet
GT	Groundwater Technology
HEAL	Hall Environmental Analysis Laboratory
HgCl ₂	mercuric chloride
INTERA	INTERA Incorporated
LBG	Leggette, Brashears & Graham, Inc.
LNAPL	light non-aqueous phase liquid
mL	milliliter
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
PPE	personal protective equipment
PSE	potentiometric surface elevation
PSTB	Petroleum Storage Tank Bureau
Report	1st Semi-Annual Groundwater Monitoring Report
RL	reporting limit
Site	Barelas Bridge Site
SSHASP	Site-Specific Health and Safety Plan
UST	underground storage tank
VOC	volatile organic compound

1.0 INTRODUCTION

In accordance with the work plan submitted on July 25, 2017, to the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB), INTERA Incorporated (INTERA) is submitting this *1st Semi-Annual Groundwater Monitoring Report* (Report) documenting the field activities at the Barelás Bridge Site (Facility #29854; Release ID #54) (Site) in Albuquerque, New Mexico (**Figure 1**). All activities were completed by INTERA in accordance with the requirements set forth in NMED PSTB Regulations (20.5 New Mexico Administrative Code [NMAC]) and in the work plan approved by PSTB on November 28, 2017 (INTERA, 2017). The deliverable identification number for this groundwater monitoring event and report is 3943-1.

1.1 Background

The Site is located at 800 Bridge Boulevard SW in Albuquerque, New Mexico. A gasoline service station has occupied the Site since the 1940s. Investigation and remediation activities have been ongoing since 1989, when petroleum hydrocarbon contamination was encountered during the removal of four underground storage tanks (USTs). Excavation was performed to remove contaminated soil occurred in the former UST pit area (August 1989) and within the former gasoline station area (October 1989). During excavation activities within the former station area, an approximately 100- to 150-gallon waste-oil tank was encountered and removed. New USTs were installed at the Site in 1990 (**Figure 2**). Information pertaining to the type of petroleum fuel stored at the Site was not available (LBG, 1990). A brief summary of investigation and remediation activities completed at the Site is presented below.

- Between August 1989 and August 1990, the Albuquerque Environmental Health Department (AEHD) completed an initial hydrogeologic investigation; which included the advancement of 19 soil borings, four of which were converted to monitoring wells (MW-1 to MW-4), and the collection and chemical analyses of soil and groundwater samples (LBG, 1990).
- From October to December 1990, Leggette, Brashears & Graham, Inc. (LBG), conducted additional hydrogeologic investigation activities, which included the advancement of five soil borings, four of which were converted to monitoring wells (MW-5 to MW-8); the collection and chemical analyses of soil and groundwater samples; and short pumping tests at two monitoring well locations. LBG concluded that the horizontal extent of contamination was delineated; groundwater flow direction was to the south; the southernmost monitoring wells, MW-1, MW-2, and MW-3, did not contain petroleum hydrocarbons in groundwater at concentrations that exceeded New Mexico Water Quality Control Commission (NMWQCC) Standards; and contaminants of concern included

benzene, toluene, ethylbenzene, total xylenes, iron, and manganese (LBG, 1990) (**Figure 2**).

- In August 1992, Groundwater Technology (GT) oversaw the advancement of five soil borings. These borings were completed as multi-purpose wells for use in an air-sparge/soil vapor extraction (AS/SVE) pilot test. Results of the AS/SVE pilot test indicated that an AS/SVE system could effectively remediate the source zone; therefore, GT proposed installing a full-scale system (GT, 1992). Based on existing monitoring wells, it appears that the full-scale AS/SVE system was installed. Documents describing this system and its operation were not reviewed.
- INTERA conducted the 1st semi-annual groundwater monitoring event in December 2014. The estimated groundwater flow direction was to the south-southeast, and the estimated magnitude of the hydraulic gradient was 0.002 ft/ft. Groundwater analytical results indicated that total naphthalenes, and dissolved iron and manganese were present in groundwater at concentrations that exceed NMWQCC Standards (INTERA, 2014).
- INTERA conducted the 2nd semi-annual groundwater monitoring event in May 2015. The estimated groundwater flow direction and magnitude of the hydraulic gradient was identical to what was observed in December 2014. Groundwater analytical results indicated that benzene, total naphthalenes, and dissolved iron and manganese existed in groundwater at concentrations that exceed NMWQCC Standards (INTERA, 2015). The INTERA report prepared following the 2nd semi-annual groundwater monitoring event in May 2015 recommended that additional groundwater monitoring be conducted at the Site and a work plan was developed and sent to the NMED PSTB (INTERA, 2017).

1.2 Scope of Work

The scope of work for the 1st semi-annual groundwater sampling event, as specified in the approved work plan (INTERA, 2017), included the following activities:

- Conduct project planning activities.
- Remove caps from all monitoring wells to relieve pressure caused by a fluctuating water table.
- Remove the root ball from monitoring well MW-4.
- Gauge depth to water and total depth at monitoring wells MW-4, MW-7, MW-8, MW-9, VP-2, and VP-5 using an oil-water interface probe.
- Collect groundwater samples from monitoring wells MW-4, MW-7, MW-8, MW-9, VP-2, and VP-5 and analyze the groundwater samples for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method 8260B.

- Prepare a report that summarizes all monitoring activities and the resulting data.

The Site-Specific Health and Safety Plan (SSHASP) was developed and reviewed by INTERA staff prior to the initiation of the project.

1.3 Work Plan Deviations

Two work plan deviations occurred during this 1st semi-annual groundwater monitoring event. The first deviation was that due to the availability of equipment, groundwater samples were not collected using low-flow sampling techniques. The monitoring wells were purged a minimum of three casing volumes and stabilization of water quality parameters was achieved prior to sample collection. The second work plan deviation was that INTERA was unable to remove the root ball at monitoring well MW-4. The tool fabricated to remove the root ball was unsuccessful in grabbing and removing the root ball. Although it was not removed, a groundwater sample was successfully collected from monitoring well MW-4 and is considered representative of aquifer conditions.

1.4 Project Preparation

Upon receipt of authorization to proceed from the NMED PSTB, INTERA performed the following tasks prior to commencing the 2nd semi-annual field activities:

- Contacted the NMED PSTB project manager, Mr. Jack Dickey, 96 hours prior to the commencement of planned on-site activities.
- Contacted the current Site owner, Roberts Oil, prior to arriving on Site (see the Access Agreement in **Appendix A**).
- Obtained required field supplies and tested required field equipment.
- Obtained sample containers from Hall Environmental Analysis Laboratory (HEAL).

2.0 FIELD ACTIVITIES

Field activities for this 1st semi-annual groundwater monitoring event were conducted on January 12, 2018. The SSHASP was reviewed in detail by INTERA field staff and was strictly followed during all Site activities. Work was performed in Occupational Safety and Health Administration Level D personal protective equipment (PPE). A copy of the field notes is included in **Appendix B**.

2.1 Fluid Level Gauging

Fluid levels were gauged in monitoring wells MW-4, MW-7, MW-8, MW-9, VP-2, and VP-5 on January 12, 2018, using a properly decontaminated oil-water interface probe (**Figure 2**). Fluid level measurements are documented in **Table 1**. Historical fluid levels for monitoring wells not monitored during this event and for monitoring wells that were previously plugged and abandoned are included in **Appendix C**. A January 12, 2018 potentiometric surface map is provided in **Figure 3**.

2.2 Groundwater Sampling

On January 12, 2018, groundwater samples were collected using dedicated, disposable polyethylene bailers the following monitoring wells: MW-4, MW-7, MW-8, MW-9, VP-2, and VP-5. Groundwater samples were collected after the monitoring wells had been purged of three casing volumes and water quality parameters (temperature, specific conductivity, and pH) stabilized for three consecutive readings. A record of all water quality parameters recorded during purging and sampling of each monitoring well is documented in the field forms presented in **Appendix B**. Stabilized water quality parameter values recorded at each monitoring well prior to groundwater sample collection are summarized in **Table 2**. Groundwater samples collected for analysis of VOCs were placed in 40-milliliter (mL) glass vials preserved with mercuric chloride (HgCl₂). The groundwater purged from all Site monitoring wells was observed to have a petroleum hydrocarbon odor.

After collection, the groundwater samples were labeled and immediately packed in an ice-chilled cooler for transport to HEAL. Proper chain-of-custody procedures were adhered to during groundwater sample collection, transport, and delivery to the laboratory. Laboratory analytical results are summarized in **Table 3**, and the groundwater laboratory analytical report is included in **Appendix D**. Historical groundwater laboratory analytical results for monitoring wells not monitored during this event and for monitoring wells that were previously plugged and abandoned are included in **Appendix C**.

2.3 Project Health and Safety, Quality Assurance, and Investigation-Derived Waste

The INTERA-prepared SSHASP was strictly followed during all Site activities. All field activities were conducted using modified Level D PPE, including safety glasses and steel-toed boots. Nitrile gloves were used to handle all groundwater samples. A safety meeting was conducted prior to the initiation of work, and chemical and physical hazards of the work were reviewed and discussed. Quality assurance practices, which were strictly adhered to, included decontaminating the oil/water interface probe with a Liquinox[®] solution and double-rinsing with de-ionized water between gauging and groundwater sampling activities at each well. Purge water produced from each monitoring well during groundwater sampling was applied to an impermeable surface (asphalt and/or concrete) and allowed to evaporate.

Laboratory data was not qualified. No contamination was noted in the trip blank. Laboratory quality control sample analyses indicated that the data were within method accuracy and precision limits.

3.0 RESULTS

The results of the field activities conducted at the Site are summarized in the following subsections.

3.1 Fluid Level Gauging and Groundwater Flow Direction

Light non-aqueous phase liquid (LNAPL) of measurable thickness (greater than 0.01 feet [ft]) was not observed in any Site monitoring wells. Recorded depth to water measurements ranged from 7.75 ft below top of casing (btoc) at monitoring well MW-4 to 9.02 ft btoc at monitoring well MW-8. The potentiometric surface elevations (PSEs) ranged from 4,935.16 ft above mean sea level (amsl) at monitoring well MW-7 to 4,935.62 ft amsl at monitoring well VP-5 (**Table 1**). When compared to the previous groundwater monitoring event conducted in May 2015, groundwater levels have increased on average 0.12 ft.

The groundwater elevation surface across the Site is relatively flat. The estimated groundwater flow direction is to the south-southeast and the estimated magnitude of the calculated hydraulic gradient is 0.002 ft/ft (**Figure 3**).

3.2 Groundwater Quality Parameters

Groundwater quality parameters were measured and recorded during monitoring well purging until the water quality parameters stabilized. Stabilized temperatures ranged from 13.82 degrees Celsius (°C) or 56.88 degrees Fahrenheit (°F) at monitoring well MW-4 to 17.01°C or 62.62°F at monitoring well MW-8. Stabilized specific conductivity values ranged from 389 microSiemens per centimeter (µS/cm) at monitoring well MW-4 to 507 µS/cm at monitoring well VP-5. Stabilized pH values ranged from 7.44 at monitoring well MW-4 to 7.82 at monitoring well MW-8. Groundwater quality parameter values are provided in the field notes and sampling forms presented in **Appendix B**, and the initial and stabilized groundwater quality parameters are summarized in **Table 2**.

3.3 Groundwater Analytical Results

Four of the six groundwater samples (MW-8, MW-9, VP-2, and VP-5) had VOCs detected in groundwater at concentrations above the laboratory reporting limit (RL). Three of these four groundwater samples (MW-8, MW-9, and VP-5) had VOCs detected at concentrations that exceed their respective NMWQCC Standards (**Table 3** and **Figure 4**).

Concentrations of total naphthalenes (sum of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) greater than the NMWQCC Standard of 30 micrograms per liter (µg/L) were detected in groundwater samples collected from monitoring well MW-8 (56 µg/L), monitoring

well MW-9 (68 µg/L), and monitoring well VP-5 (95 µg/L). Total naphthalenes concentrations and groundwater elevations over time for Site monitoring wells are presented in **Figures 5a, 6a, 7a, 8a, 9a, and 10a**.

Benzene was not detected in any monitoring wells at concentrations that exceeded the NMWQCC Standard for benzene of 10 µg/L. **Figures 5b, 6b, 7b, 8b, 9b, and 10b** illustrate benzene concentrations and groundwater elevations over time for Site monitoring wells.

All other detected VOC concentrations were below their respective NMWQCC Standards. The practical quantitative limit for 1,2-dibromoethane (EDB) in the analytical laboratory report is reported as 1.0 and 2.0 µg/L for the samples collected during this sampling event. This is greater than the EDB NMWQCC Standard of 0.1 µg/L. Results from the two previous groundwater sampling events conducted in December 2014 and May 2015, where EDB was analyzed via EPA Method 504.1, which has a practical quantitative limit of 0.010 µg/L, indicated that EDB was not present in collected groundwater samples at concentrations greater than 0.010 µg/L. These historical results suggest that EDB is not a contaminant of concern at the Site.

A summary of the analytical data, including which monitoring wells contained contaminants of concern in excess of the NMWQCC Standards, is presented in **Table 3** and **Figure 4**. A copy of the laboratory report is included in **Appendix D**.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The objectives of INTERA's 1st semi-annual groundwater monitoring event conducted on January 12, 2018, are to provide an evaluation of the Site groundwater flow direction and an assessment of dissolved contaminant concentration trends relative to NMWQCC Standards. Based on the results of the field investigation, INTERA has compiled the following conclusions and recommendations.

4.1 Conclusions

- LNAPL was not observed at any of the Site monitoring wells.
- The water levels at each monitoring well increased compared to the water levels measured during the previous groundwater monitoring event conducted in May 2015. On average, the water level increase was 0.12 ft.
- The potentiometric surface is relatively flat across the Site. The estimated groundwater flow is to the south-southeast and the estimated magnitude of the calculated hydraulic gradient is 0.002 ft/ft.
- Total naphthalenes were detected in groundwater at concentrations above the NMWQCC Standard in monitoring wells MW-8, MW-9 and VP-5 (**Table 3** and **Figures 7a, 8a, and 10a**). Concentrations in groundwater samples collected from monitoring wells MW-8 and VP-5 are showing a decreasing trend while the groundwater sample collected from monitoring well MW-9 saw an increase in total naphthalenes during this sampling event. Groundwater samples collected from monitoring well MW-9 historically have had large fluctuations in total naphthalenes concentrations.
- The benzene concentration detected in the groundwater sample collected from monitoring well MW-9 was below the benzene NMWQCC Standard (**Figure 8b** and **Table 3**). Groundwater samples collected from monitoring well MW-9 historically have had large fluctuations in benzene concentrations. Benzene was detected above the NMWQCC Standard during the previous groundwater monitoring event (May 2015).
- The areal extent of the dissolved-phase contaminant plume is defined except to the northwest.

4.2 Recommendations

Based on the results of the January 12, 2018 groundwater monitoring event, INTERA makes the following recommendations:

- Continue groundwater monitoring at the Site on a semi-annual basis to assess dissolved-phase contaminant trends. Analytical results of the current sampling event indicate that

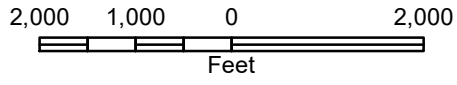
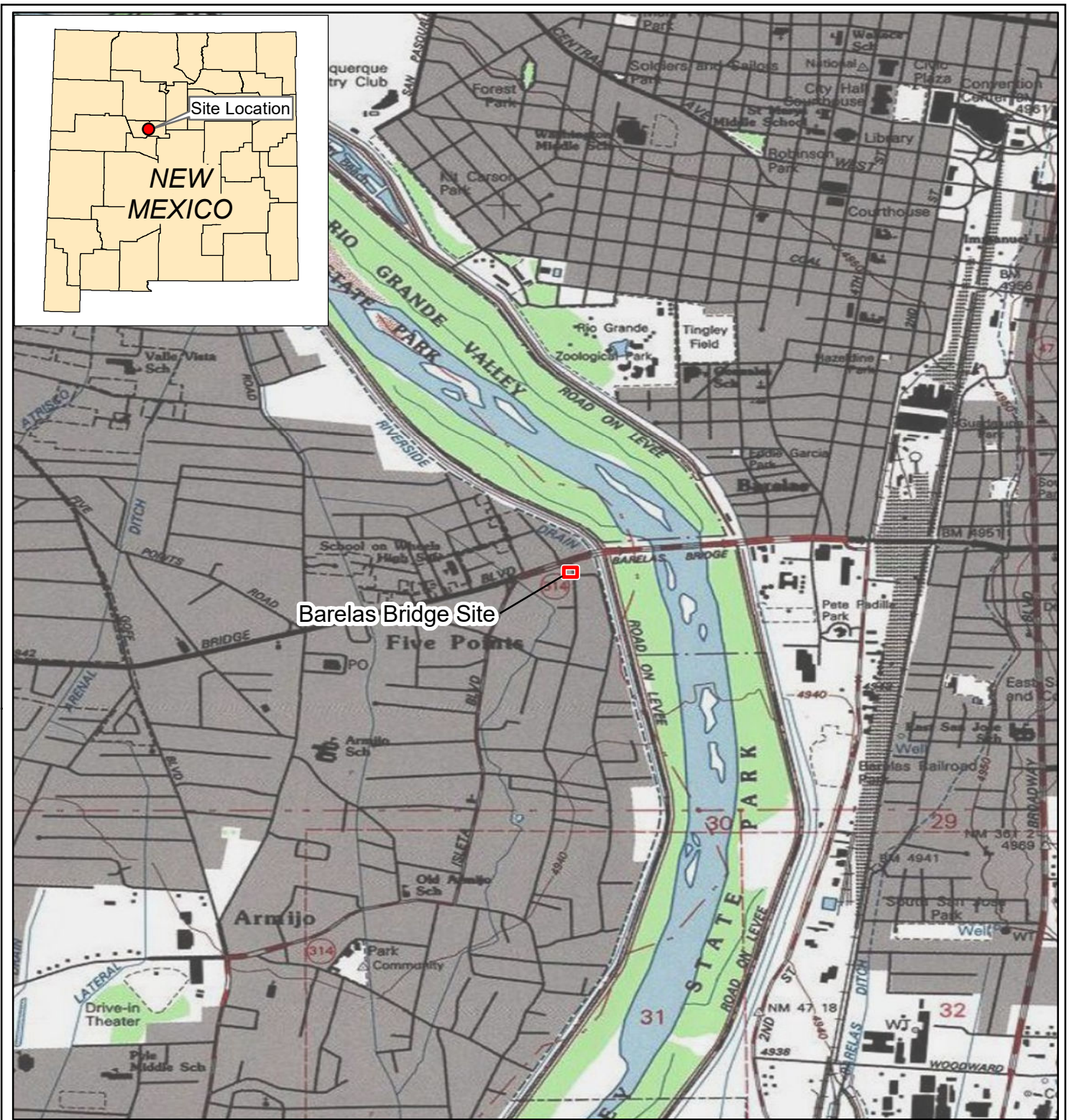
dissolved-phase petroleum hydrocarbons, particularly total naphthalenes, while with generally decreasing concentrations, continue to be a concern at the Site.

- Confirm the actual screen intervals at monitoring wells VP-2 and VP-5 to verify that these monitoring wells are screened across the water table. INTERA recommends reviewing the AS/SVE remediation system as-builts and other pertinent reports to determine if the screened intervals for these monitoring wells are identified in these reports. If a file review cannot verify that these monitoring wells are screened across the water table, INTERA recommends video logging these wells to identify the screen intervals.
- Make another attempt to remove the obstruction at monitoring well MW-4 to maintain the integrity of this monitoring well and prevent further damage. INTERA recommends adding additional hooking devices to the removal tool to increase the likelihood that the tool might be successful in removing the root ball.
- Evaluate the need to install a monitoring well northwest of monitoring well VP-5 to aid in delineating the aerial extent of the dissolved-phase total naphthalenes plume to the northwest.

5.0 REFERENCES

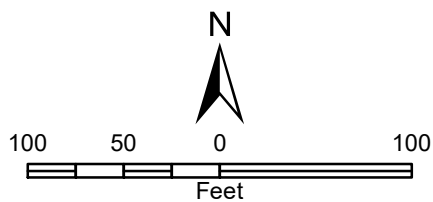
- Groundwater Technology (GT). 1992. *Reclamation Proposal Barelas Bridge GWPA Site, 800 Bridge Blvd., SW, Albuquerque, New Mexico*. December 4.
- INTERA Incorporated. 2014b. 1st Semi-Annual Groundwater Monitoring Report, Barelas Bridge Site, Facility # 29854; Release ID # 54. December 23.
- INTERA Incorporated. 2015. 2nd Semi-Annual Groundwater Monitoring Report, Barelas Bridge Site, Facility # 29854; Release ID # 54. June 25.
- INTERA Incorporated. 2017. Work Plan and Cost Estimate for Semi-Annual Groundwater Monitoring, Barelas Bridge, Facility # 29854; Release ID # 54. July 25.
- Leggette, Brashears & Graham, Inc. (LBG). 1990. *Hydrogeologic Investigation of the 800 Bridge Street Site, Albuquerque, New Mexico*. December.

FIGURES



Site Location

Figure 1
Site Location
 1st Semi-Annual Groundwater
 Monitoring Event, January 12, 2018
 Barelas Bridge
 Albuquerque, New Mexico



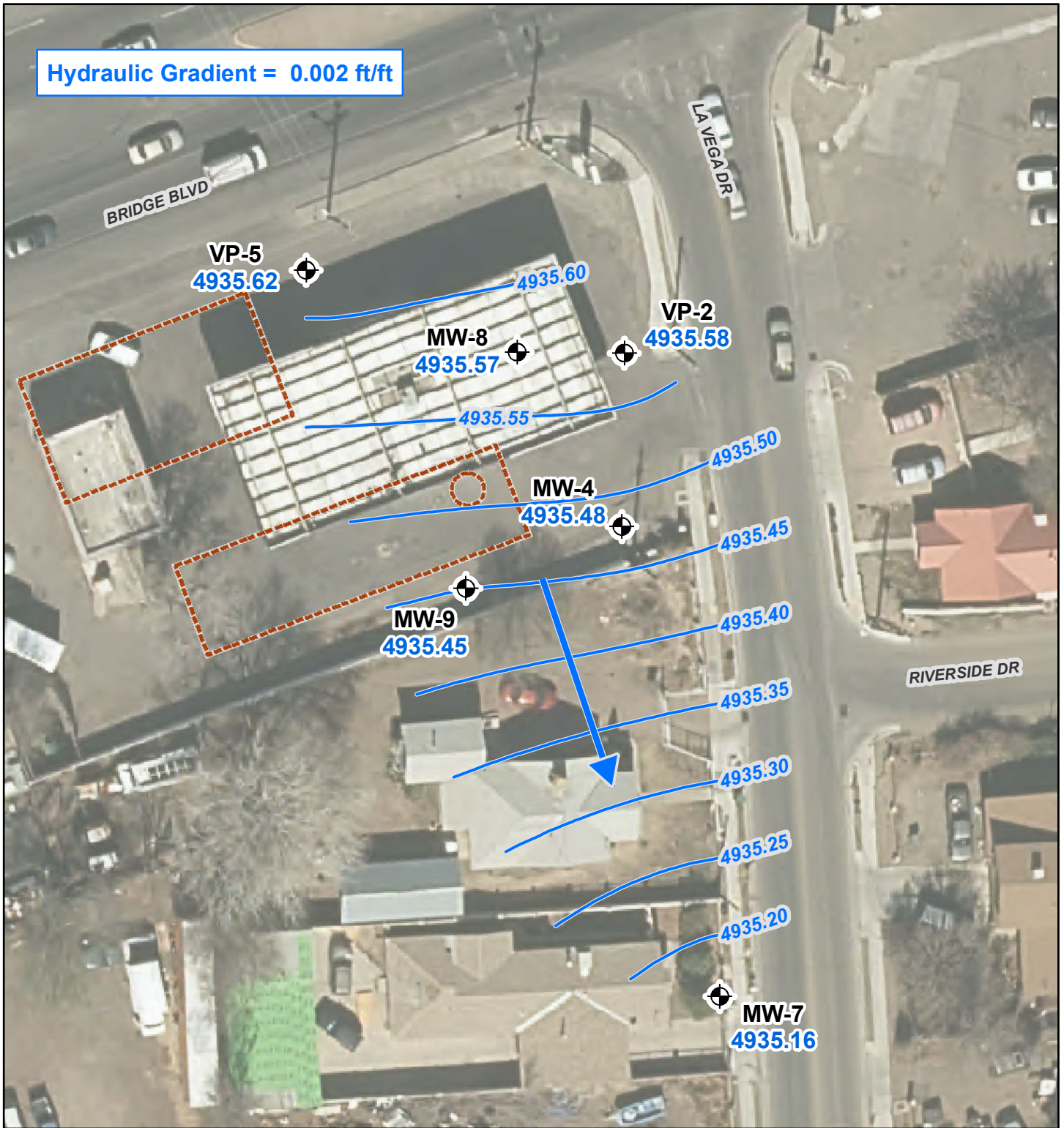
Legend

- Monitoring Well Location
- Plugged and Abandoned or Not Located
- Former Site Feature

Source(s): Aerial – BERNCO website, dated 2016;
 Well locations – Groundwater Technology, 1992 and Kleinfelder, 2006;
 Site features – Leggette, Brashears & Graham Inc., 1990

Figure 2
Site Plan
 1st Semi-Annual Groundwater
 Monitoring Event, January 12, 2018
 Barelás Bridge
 Albuquerque, New Mexico

Hydraulic Gradient = 0.002 ft/ft



Legend

- Monitoring Well Location
- Groundwater Elevation Contour (ft amsl)
- Estimated Groundwater Flow Direction
- Former Site Feature

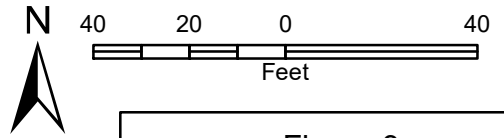
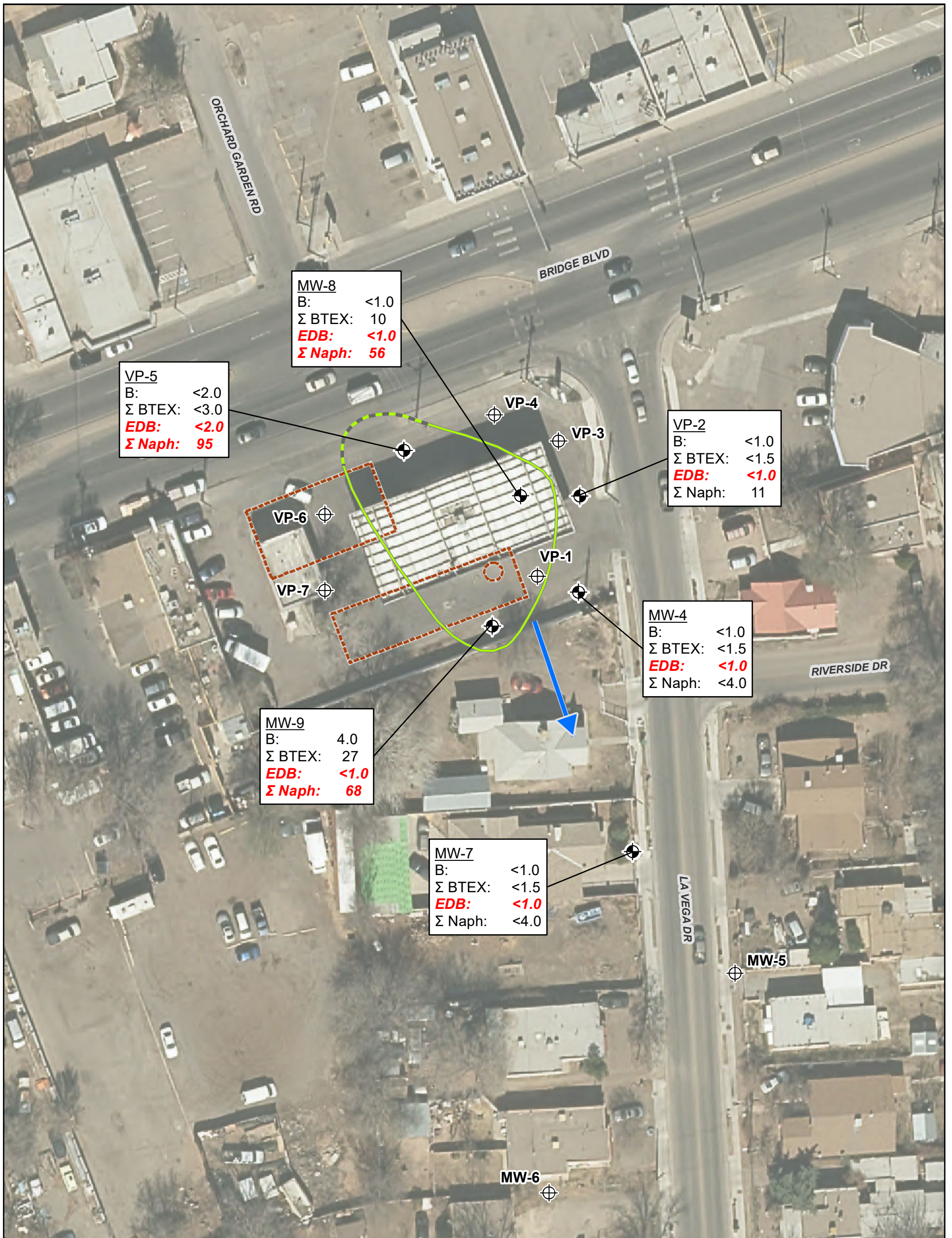


Figure 3
Potentiometric Surface Map,
January 12, 2018
1st Semi-Annual Groundwater
Monitoring Event, January 12, 2018
Barel Bridge
Albuquerque, New Mexico

Source(s): Aerial – BERNCO website, dated 2016;
Well locations – Groundwater Technology, 1992 and Kleinfelder, 2006;
Site features – Leggette, Brashears & Graham Inc., 1990





MW-8
 B: <1.0
 Σ BTEX: 10
EDB: <1.0
Σ Naph: 56

VP-5
 B: <2.0
 Σ BTEX: <3.0
EDB: <2.0
Σ Naph: 95

VP-2
 B: <1.0
 Σ BTEX: <1.5
EDB: <1.0
 Σ Naph: 11

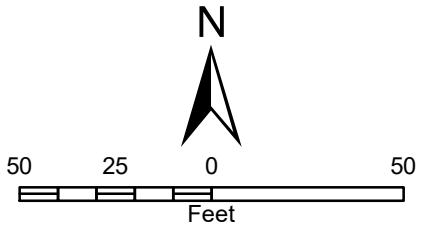
MW-4
 B: <1.0
 Σ BTEX: <1.5
EDB: <1.0
 Σ Naph: <4.0

MW-9
 B: 4.0
 Σ BTEX: 27
EDB: <1.0
Σ Naph: 68

MW-7
 B: <1.0
 Σ BTEX: <1.5
EDB: <1.0
 Σ Naph: <4.0

- Legend**
- ⊕ Monitoring Well Location
 - ⊕ Plugged and Abandoned or Not Located
 - Estimated Extent of Actionable Dissolved-Phase Contamination (dashed where inferred)
 - Estimated Groundwater Flow Direction
 - ▭ Former Site Feature

B = Benzene
 Σ BTEX = Benzene + Toluene + Ethylbenzene + Total Xylenes
 EDB = 1,2-dibromoethane
 Σ Naph = Naphthalene + 1,Methylnaphthalene + 2, Methylnaphthalene



Well ID
 VOC contaminant results in µg/L (micrograms per liter),
Red/Bold/Italic indicates value or laboratory reporting limit in excess of the NMWQCC standards.

Figure 4
 Distribution of Contaminants in Groundwater, January 12, 2018
 1st Semi-Annual Groundwater Monitoring Event, January 12, 2018
 Barelas Bridge
 Albuquerque, New Mexico



Source(s): Aerial – BERNCO website, dated 2016;
 Well locations – Groundwater Technology, 1992 and Kleinfelder, 2006;
 Site features – Leggette, Brashears & Graham Inc., 1990

Figure 5a: Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-4

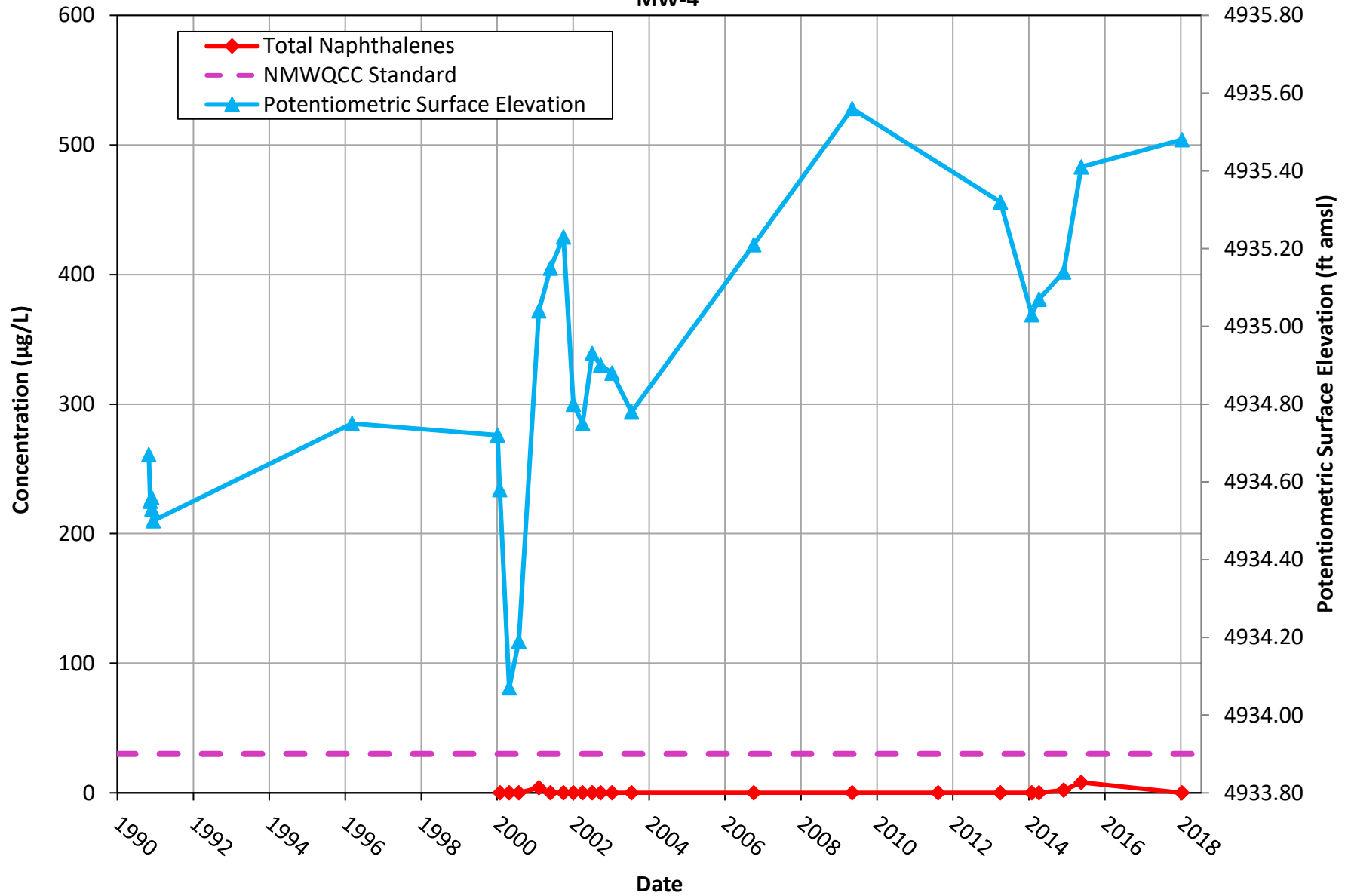


Figure 5b: Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-4

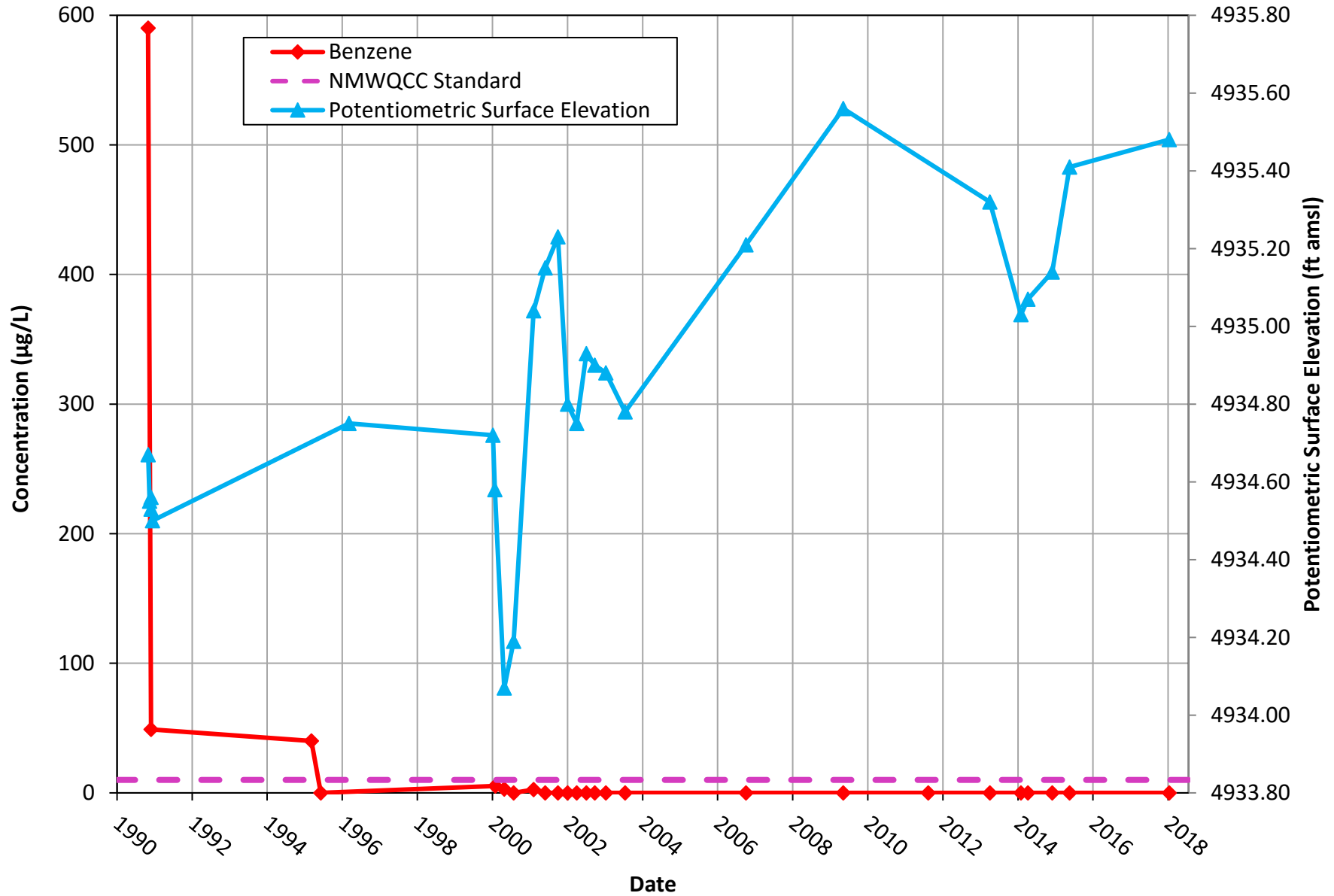


Figure 6a: Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-7

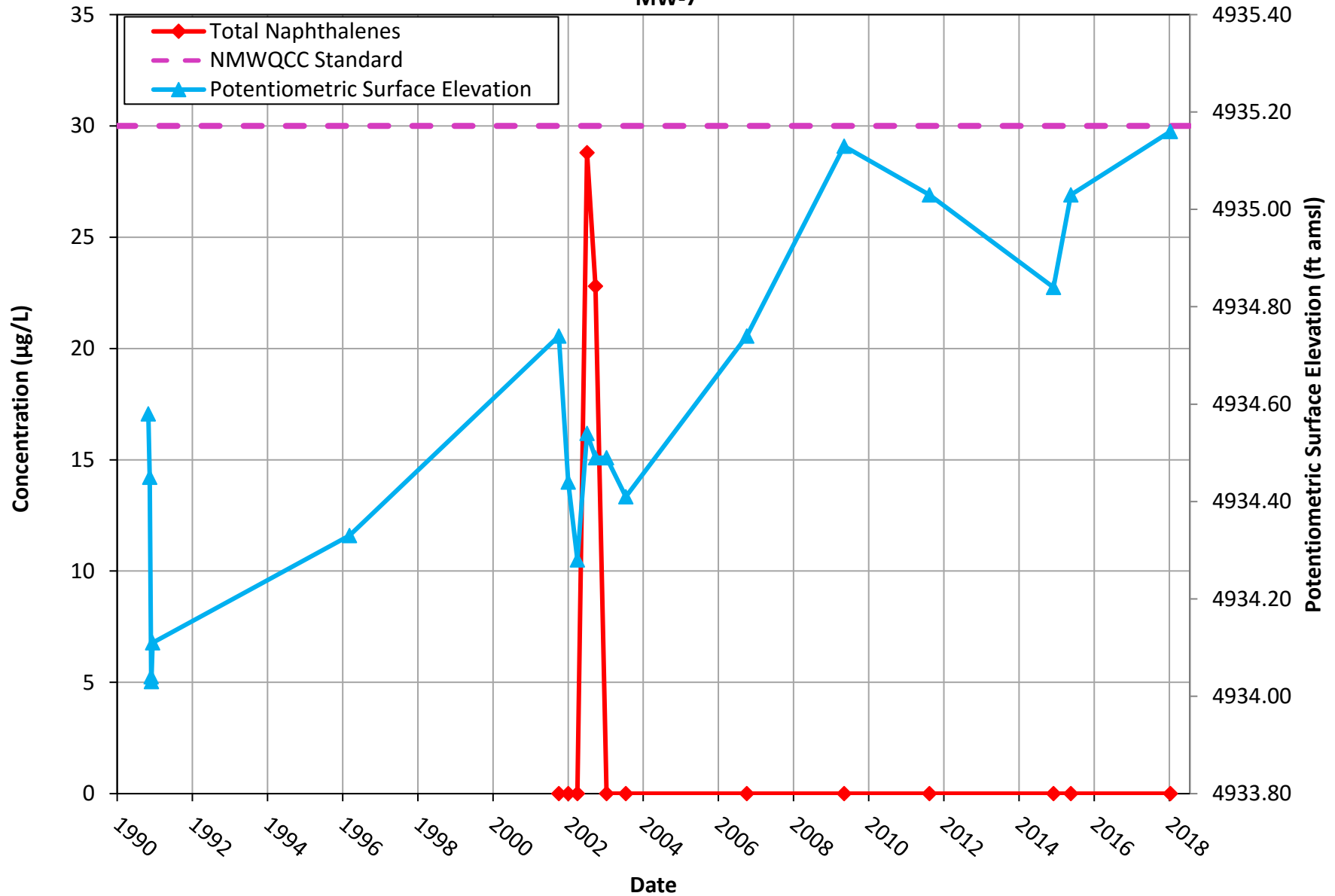


Figure 6b: Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-7

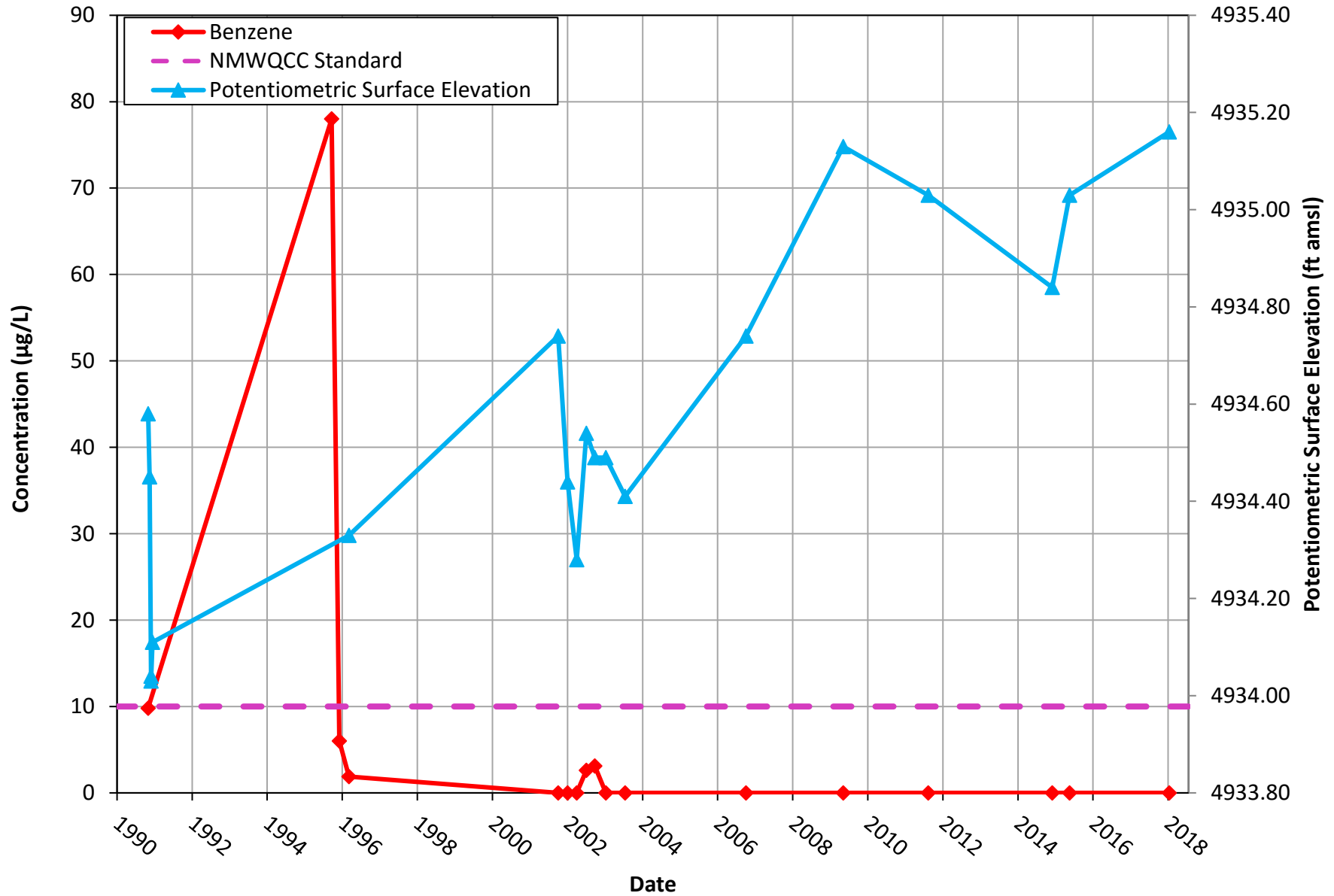


Figure 7a: Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-8

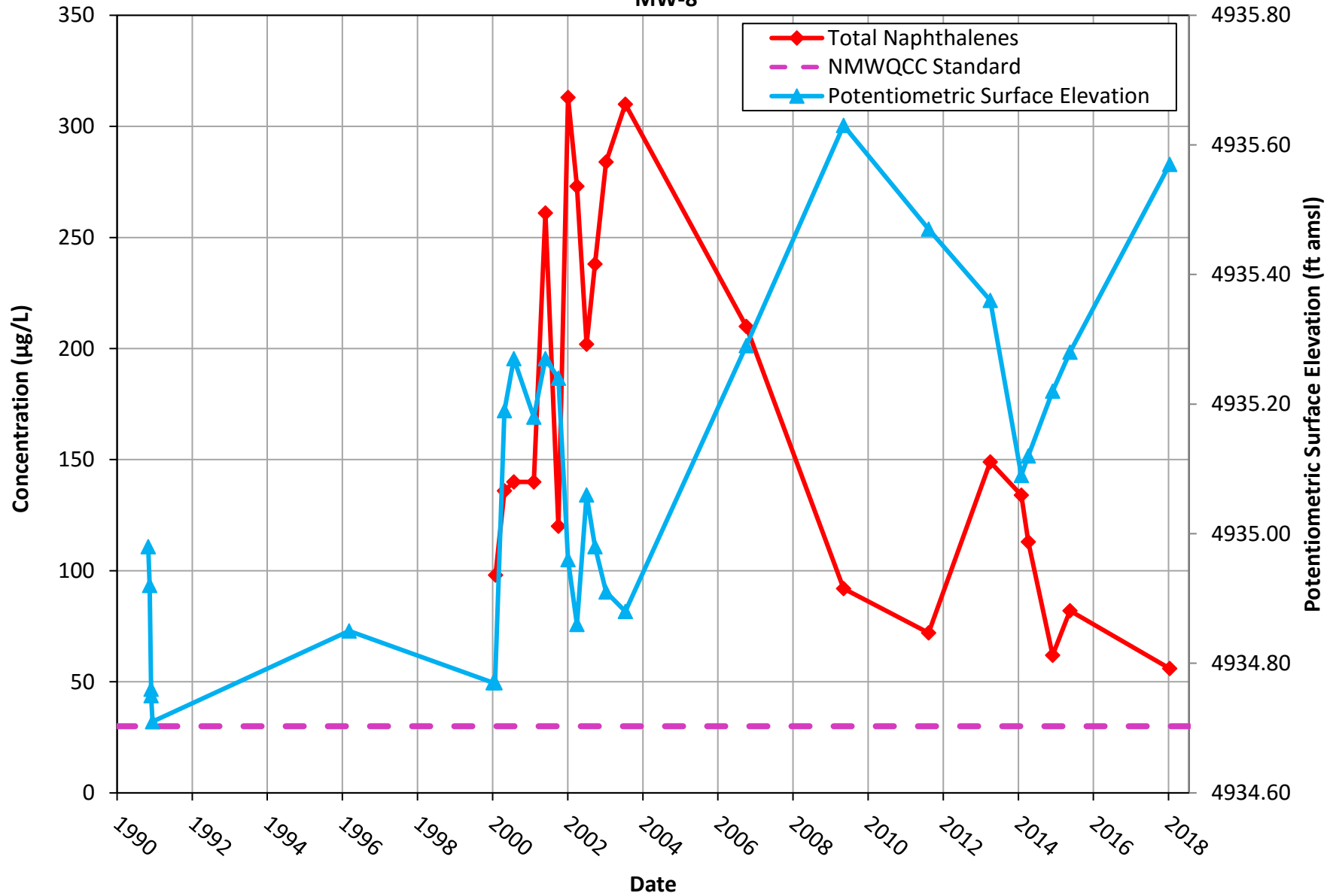


Figure 7b: Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-8

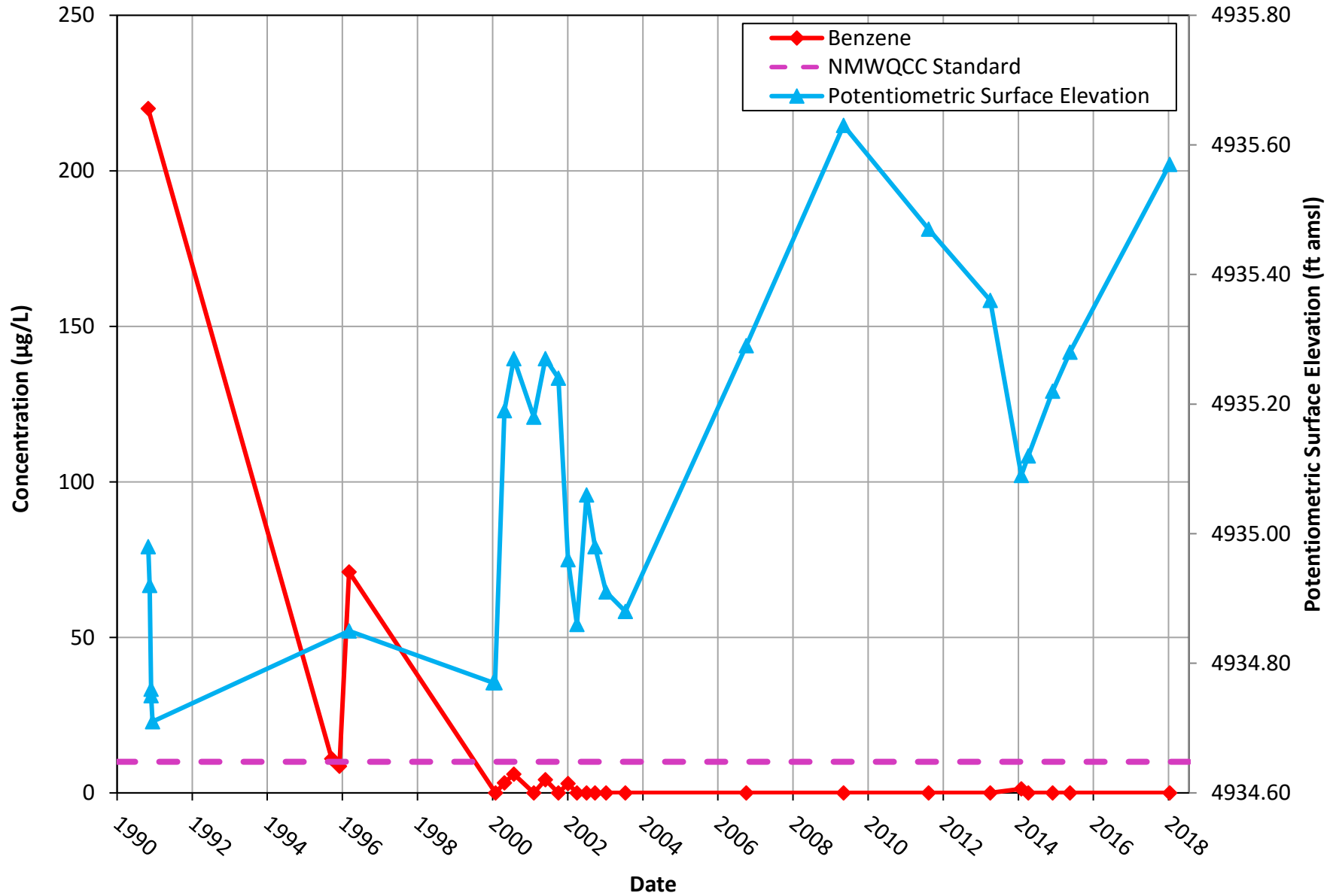


Figure 8a: Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-9

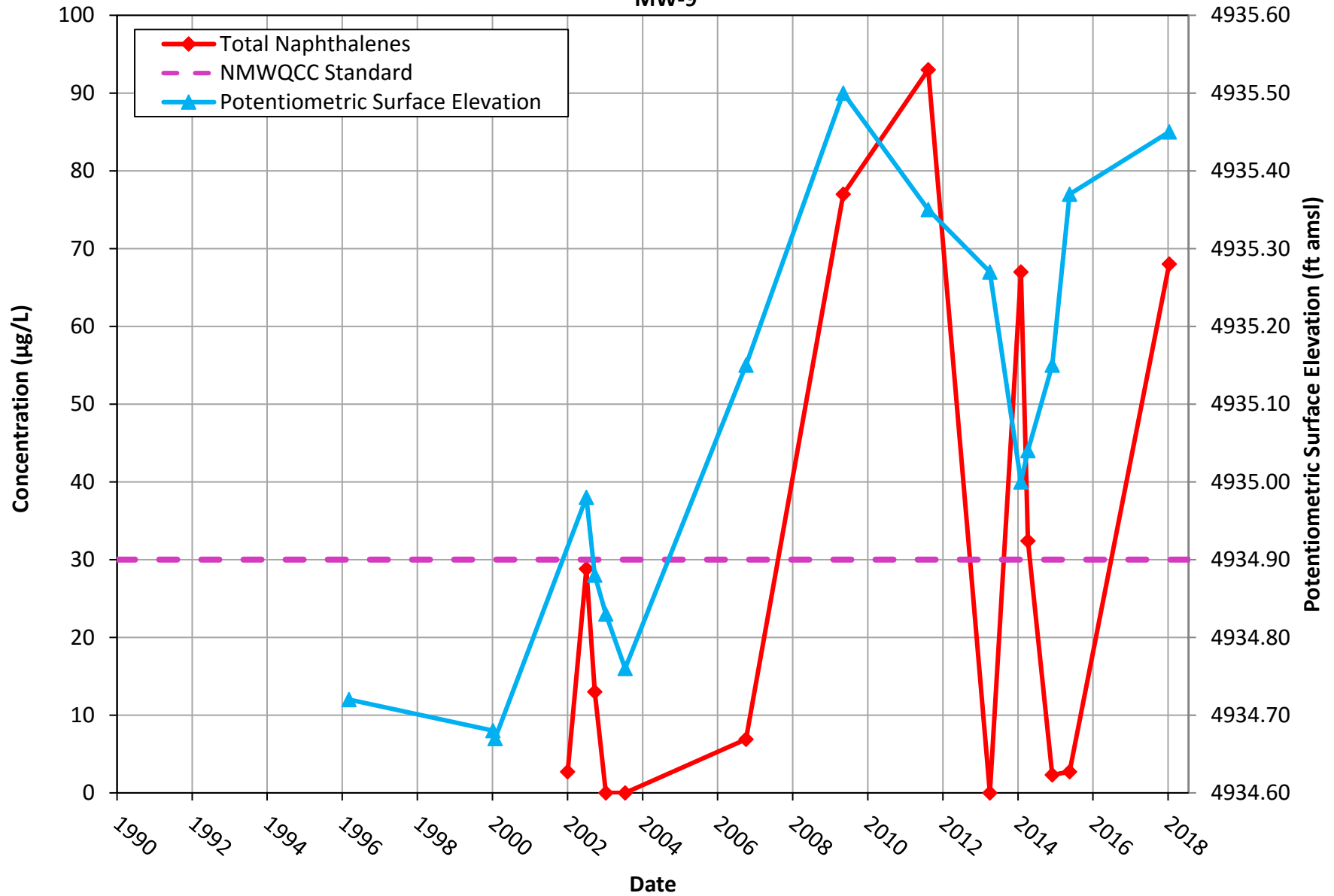


Figure 8b: Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – MW-9

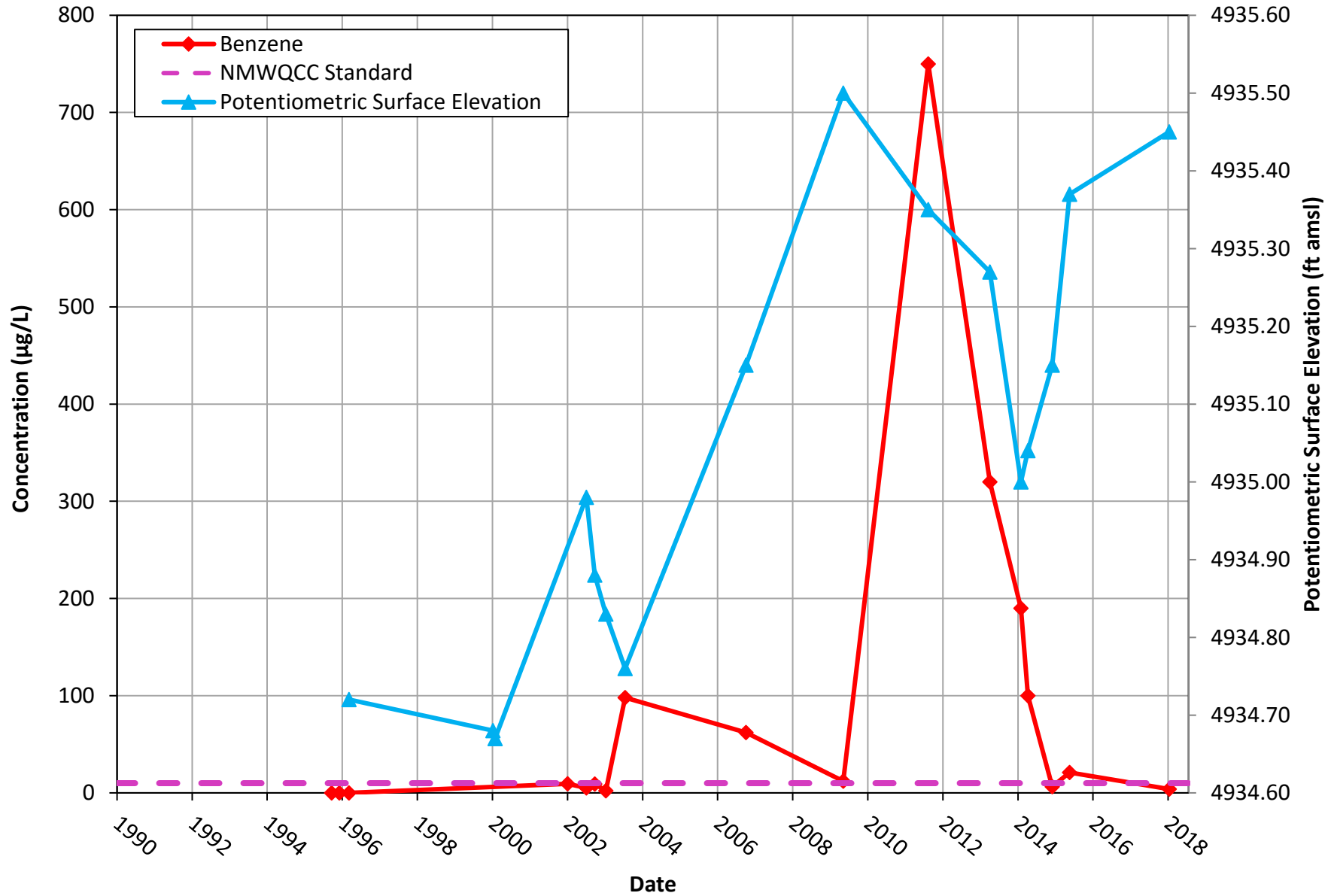


Figure 9a: Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-2

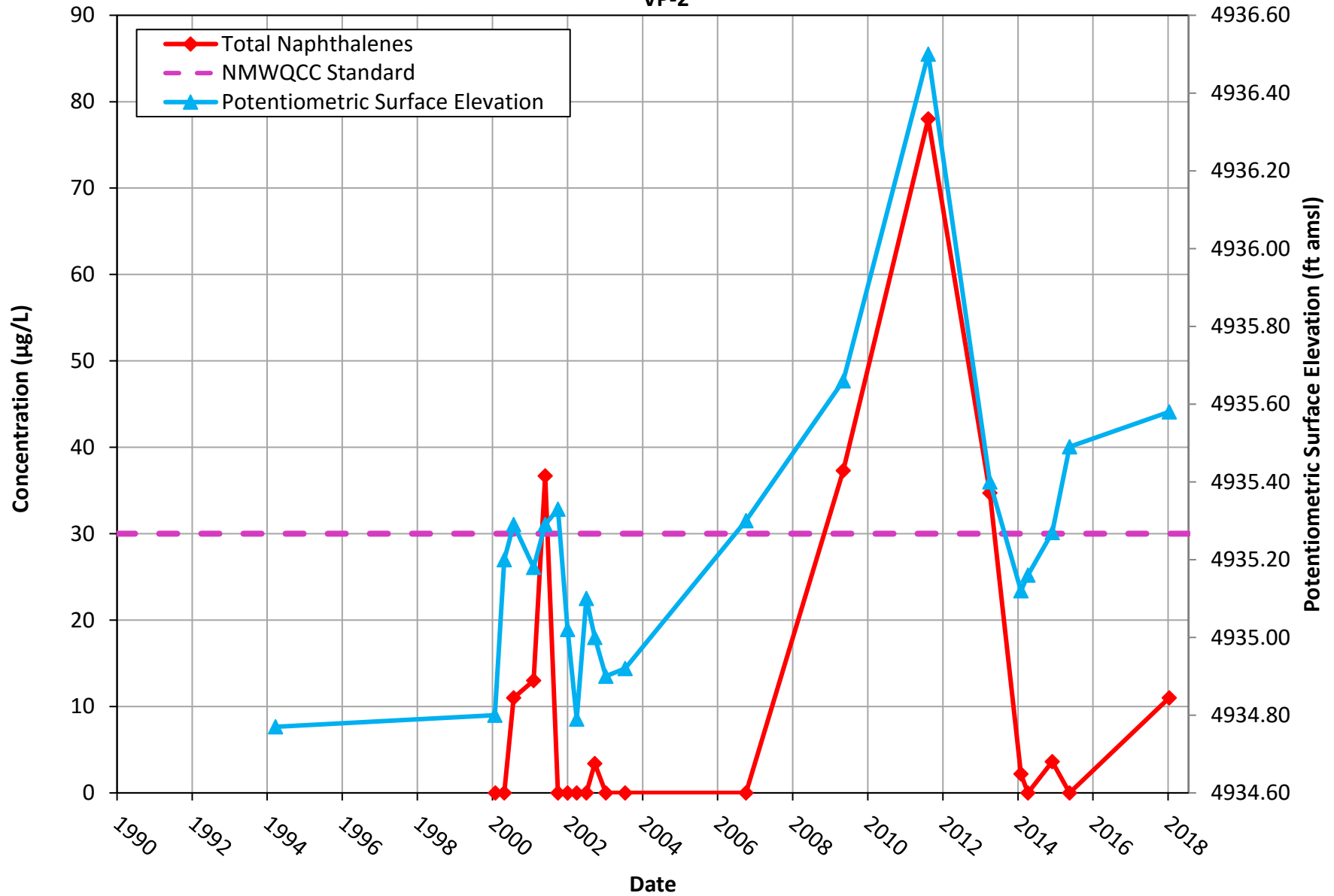


Figure 9b: Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-2

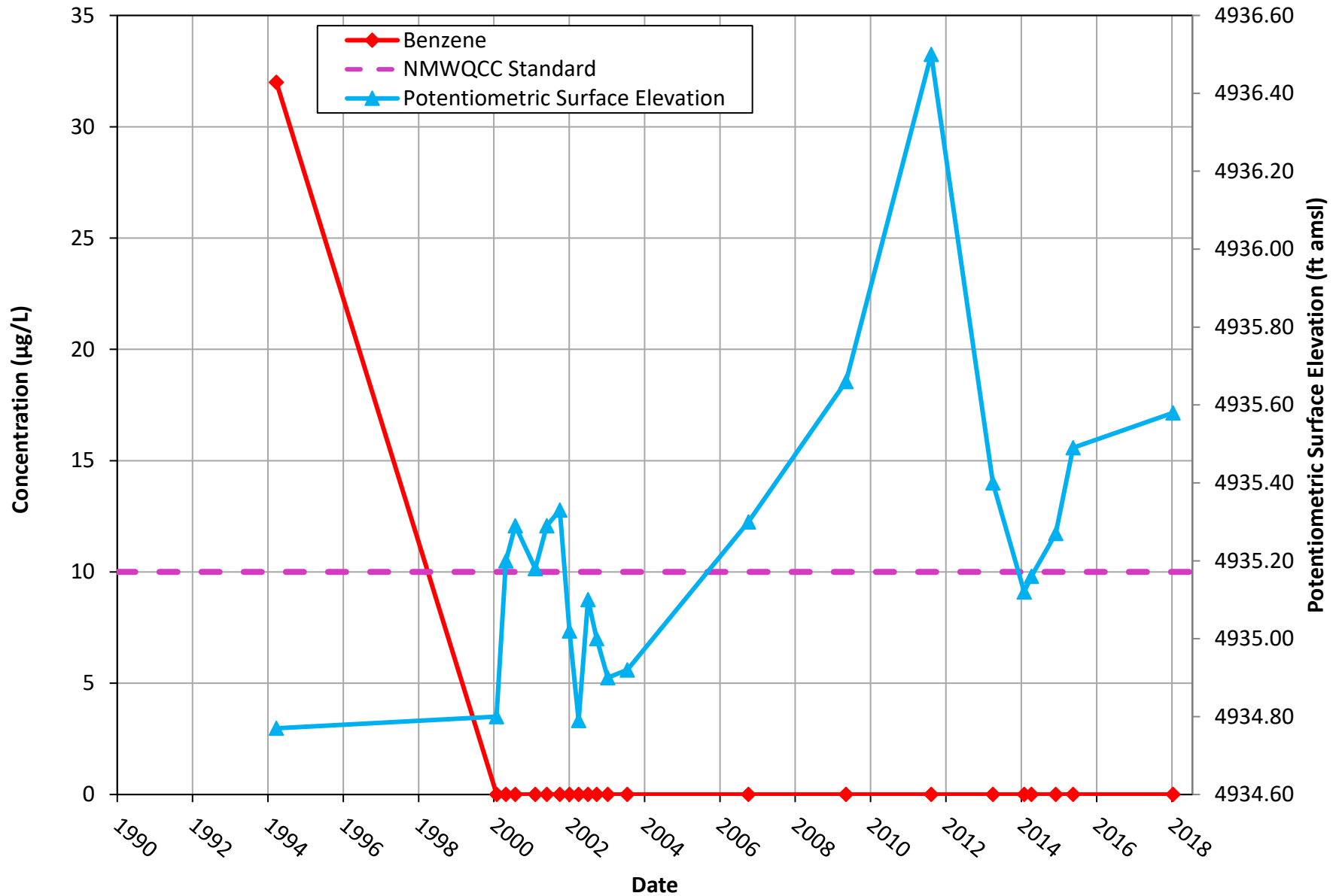


Figure 10a: Total Naphthalenes Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-5

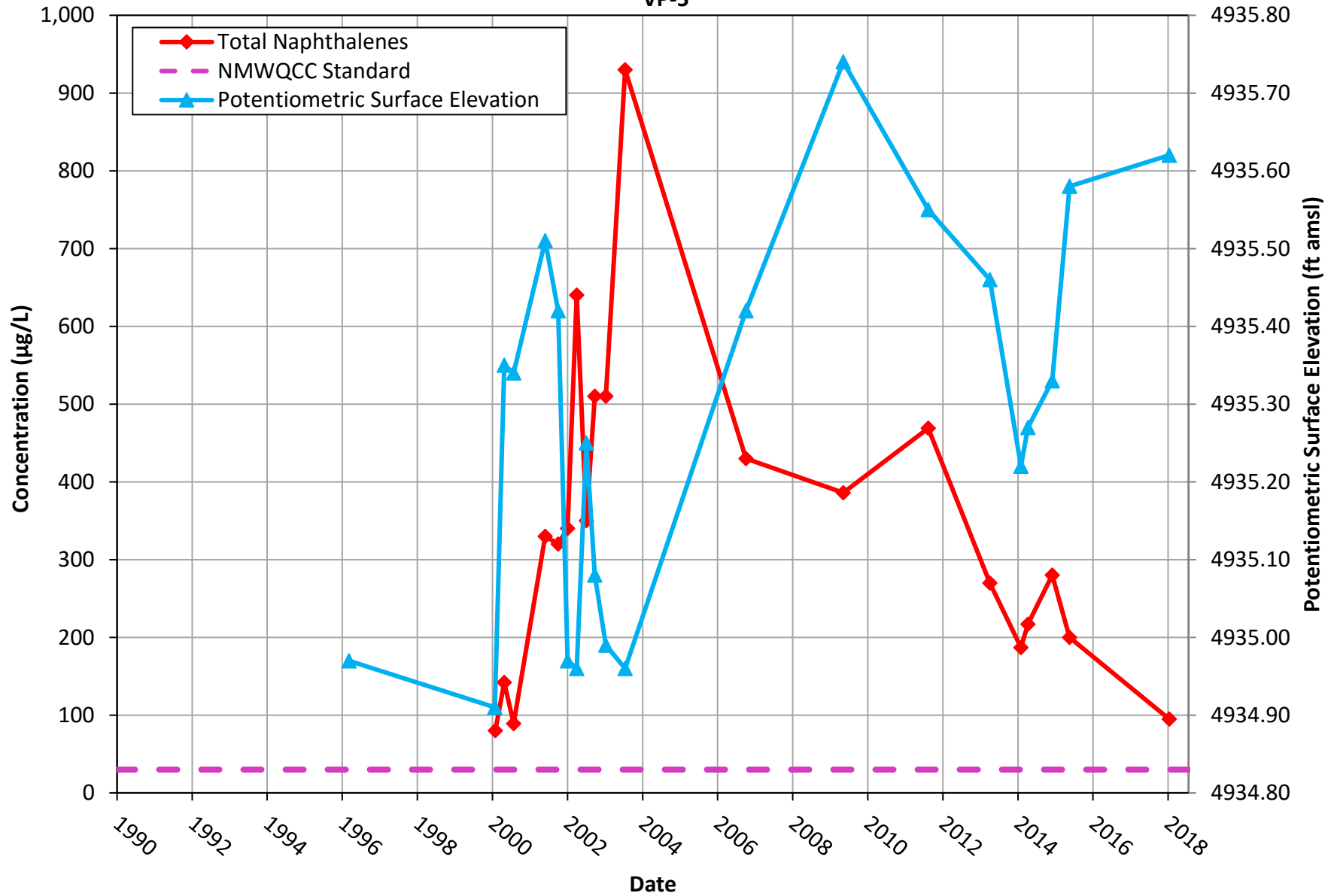
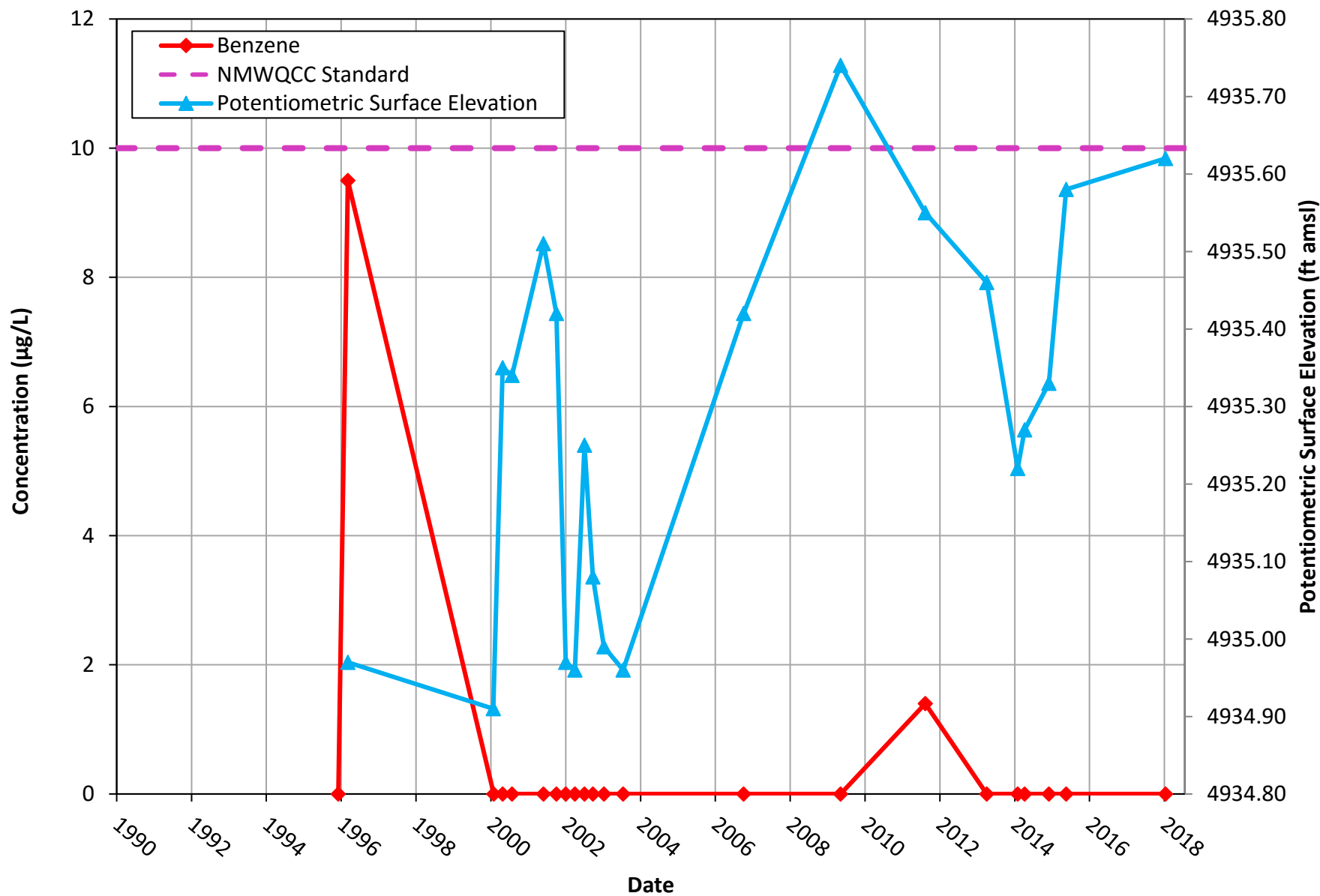


Figure 10b: Benzene Concentration and Groundwater Potentiometric Surface Elevation vs. Time – VP-5



TABLES

TABLE 1
Fluid Level Measurements
 1st Semi-Annual Groundwater Monitoring Report
 Barelás Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Well ID	Date	Screen Interval (ft bgs)	Top of Casing Elevation (ft amsl)	Depth to Water (ft btoc)	Total Depth (ft btoc)	Potentiometric Surface Elevation (ft amsl) ¹
MW-4	2/8/1990	3.5-18.5	4943.86	---	23.5	---
	10/31/1990	3.5-18.5	4943.86	---	---	4934.67
	11/14/1990	3.5-18.5	4943.86	---	---	4934.55
	11/28/1990	3.5-18.5	4943.86	---	---	4934.56
	11/29/1990	3.5-18.5	4943.86	---	---	4934.53
	12/12/1990	3.5-18.5	4943.86	---	---	4934.50
	12/4/1992	3.5-18.5	4943.23	---	23.5	---
	3/7/1996	3.5-18.5	4943.23	8.48	16.48	4934.75
	1/6/2000	3.5-18.5	4943.23	8.51	16.48	4934.72
	1/26/2000	3.5-18.5	4943.23	8.65	16.48	4934.58
	4/26/2000	3.5-18.5	4943.23	9.16	16.48	4934.07
	7/27/2000	3.5-18.5	4943.23	9.04	16.48	4934.19
	2/6/2001	3.5-18.5	4943.23	8.19	16.48	4935.04
	5/29/2001	3.5-18.5	4943.23	8.08	16.48	4935.15
	10/1/2001	3.5-18.5	4943.23	8.00	16.5	4935.23
	1/3/2002	3.5-18.5	4943.23	8.43	16.5	4934.80
	4/1/2002	3.5-18.5	4943.23	8.48	16.5	4934.75
	7/3/2002	3.5-18.5	4943.23	8.30	16.5	4934.93
	9/24/2002	3.5-18.5	4943.23	8.33	16.5	4934.90
	1/10/2003	3.5-18.5	4943.23	8.4	16.5	4934.88
	7/17/2003	3.5-18.5	4943.23	8.5	16.5	4934.78
	10/4/2006	3.5-18.5	4943.23	8.02	20.62	4935.21
	5/8/2009	3.5-18.5	4943.23	7.67	---	4935.56
	4/2/2013	3.5-18.5	4943.23	7.91	---	4935.32
	1/30/2014	3.5-18.5	4943.23	8.20	---	4935.03
	4/9/2014	3.5-18.5	4943.23	8.16	---	4935.07
12/2/2014	3.5-18.5	4943.23	8.09	10.60*	4935.14	
5/19/2015	3.5-18.5	4943.23	7.82	10.60*	4935.41	
1/12/2018	3.5-18.5	4943.23	7.75	10.60*	4935.48	
MW-7	10/18/1990	7-22	4942.94	---	22	---
	10/31/1990	7-22	4942.94	---	---	4934.58
	11/14/1990	7-22	4942.94	---	---	4934.45
	11/28/1990	7-22	4942.94	---	---	4934.04
	11/29/1990	7-22	4942.94	---	---	4934.03
	12/12/1990	7-22	4942.94	---	---	4934.11
	3/7/1996	7-22	4942.94	8.61	21.45	4934.33
	10/2/2001	7-22	4942.94	8.20	21.45	4934.74
	1/3/2002	7-22	4942.94	8.50	21.45	4934.44
	4/1/2002	7-22	4942.94	8.66	21.45	4934.28
	7/3/2002	7-22	4942.94	8.40	21.45	4934.54

TABLE 1
Fluid Level Measurements
1st Semi-Annual Groundwater Monitoring Report
Barelas Bridge Site, Facility # 29854; Release ID # 54
Albuquerque, Bernalillo County, New Mexico

Well ID	Date	Screen Interval (ft bgs)	Top of Casing Elevation (ft amsl)	Depth to Water (ft btoc)	Total Depth (ft btoc)	Potentiometric Surface Elevation (ft amsl) ¹
MW-7	9/24/2002	7-22	4942.94	8.45	21.45	4934.49
	1/10/2003	7-22	4942.94	8.45	21.45	4934.49
	7/17/2003	7-22	4942.94	8.53	21.45	4934.41
	10/4/2006	7-22	4942.94	8.20	21.60	4934.74
	5/8/2009	7-22	4942.94	7.81	21.3	4935.13
	8/13/2011	7-22	4942.94	7.91	21.3	4935.03
	12/2/2014	7-22	4942.94	8.10	21.66	4934.84
	5/19/2015	7-22	4942.94	7.91	21.66	4935.03
	1/12/2018	7-22	4942.94	7.78	21.66	4935.16
MW-8	10/18/1990	8-13	4944.57	---	13	---
	10/31/1990	8-13	4944.57	---	---	4934.98
	11/14/1990	8-13	4944.57	---	---	4934.92
	11/28/1990	8-13	4944.57	---	---	4934.76
	11/29/1990	8-13	4944.57	---	---	4934.75
	12/12/1990	8-13	4944.57	---	---	4934.71
	3/7/1996	8-13	4944.59	9.74	13.16	4934.85
	1/6/2000	8-13	4944.59	9.82	13.16	4934.77
	1/26/2000	8-13	4944.59	9.82	13.16	4934.77
	4/26/2000	8-13	4944.59	9.4	13.16	4935.19
	7/27/2000	8-13	4944.59	9.32	13.16	4935.27
	2/6/2001	8-13	4944.59	9.41	13.16	4935.18
	5/29/2001	8-13	4944.59	9.32	13.16	4935.27
	10/2/2001	8-13	4944.59	9.35	13.16	4935.24
	1/4/2002	8-13	4944.59	9.63	13.16	4934.96
	4/1/2002	8-13	4944.59	9.73	13.16	4934.86
	7/3/2002	8-13	4944.59	9.53	13.16	4935.06
	9/24/2002	8-13	4944.59	9.61	13.16	4934.98
	1/10/2003	8-13	4944.59	9.68	13.16	4934.91
	7/17/2003	8-13	4944.59	9.71	13.16	4934.88
	10/4/2006	8-13	4944.59	9.30	13.13	4935.29
	5/8/2009	8-13	4944.59	8.96	12.8	4935.63
	8/13/2011	8-13	4944.59	9.12	12.8	4935.47
	4/2/2013	8-13	4944.59	9.23	12.8	4935.36
	1/30/2014	8-13	4944.59	9.5	12.8	4935.09
	4/9/2014	8-13	4944.59	9.47	12.8	4935.12
12/2/2014	8-13	4944.59	9.37	13.32	4935.22	
5/19/2015	8-13	4944.59	9.31	13.32	4935.28	
1/12/2018	8-13	4944.59	9.02	13.32	4935.57	

TABLE 1
Fluid Level Measurements
 1st Semi-Annual Groundwater Monitoring Report
 Barelás Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Well ID	Date	Screen Interval (ft bgs)	Top of Casing Elevation (ft amsl)	Depth to Water (ft btoc)	Total Depth (ft btoc)	Potentiometric Surface Elevation (ft amsl) ¹
MW-9	8/20/1992	5-20	4943.98	---	20.0	---
	3/7/1996	5-20	4943.98	9.26	19.43	4934.72
	1/6/2000	5-20	4943.98	9.30	19.43	4934.68
	1/28/2000	5-20	4943.98	9.31	19.43	4934.67
	7/3/2002	5-20	4943.98	9.00	19.43	4934.98
	9/24/2002	5-20	4943.98	9.10	19.43	4934.88
	1/10/2003	5-20	4943.98	9.15	19.43	4934.83
	7/17/2003	5-20	4943.98	9.22	19.43	4934.76
	10/4/2006	5-20	4943.98	8.83	19.41	4935.15
	5/8/2009	5-20	4943.98	8.48	19.20	4935.5
	8/13/2011	5-20	4943.98	8.63	19.20	4935.35
	4/2/2013	5-20	4943.98	8.71	19.20	4935.27
	1/30/2014	5-20	4943.98	8.98	19.20	4935
	4/9/2014	5-20	4943.98	8.94	19.20	4935.04
	12/2/2014	5-20	4943.98	8.83	19.28	4935.15
	5/19/2015	5-20	4943.98	8.61	19.28	4935.37
1/12/2018	5-20	4943.98	8.53	19.28	4935.45	
VP-2	3/24/1994	---	4943.73	8.96	NA	4934.77
	1/26/2000	---	4943.73	8.93	NA	4934.80
	4/26/2000	---	4943.73	8.53	NA	4935.20
	7/27/2000	---	4943.73	8.44	12.57	4935.29
	2/6/2001	---	4943.73	8.55	12.57	4935.18
	5/29/2001	---	4943.73	8.44	12.57	4935.29
	10/1/2001	---	4943.73	8.40	12.65	4935.33
	1/3/2002	---	4943.73	8.71	12.57	4935.02
	4/1/2002	---	4943.73	8.94	12.57	4934.79
	7/3/2002	---	4943.73	8.63	12.57	4935.10
	9/24/2002	---	4943.73	8.73	12.57	4935.00
	1/10/2003	---	4943.73	8.83	12.57	4934.90
	7/17/2003	---	4943.73	8.81	12.57	4934.92
	10/4/2006	---	4943.73	8.43	12.72	4935.30
	5/8/2009	---	4943.73	8.07	12.50	4935.66
	8/13/2011	---	4943.73	7.23	12.50	4936.5
	4/2/2013	---	4943.73	8.33	12.50	4935.4
	1/30/2014	---	4943.73	8.61	12.50	4935.12
	4/9/2014	---	4943.73	8.57	12.50	4935.16
	12/2/2014	---	4943.73	8.46	12.80	4935.27
5/19/2015	---	4943.73	8.24	12.80	4935.49	
1/12/2018	---	4943.73	8.15	12.80	4935.58	

TABLE 1
Fluid Level Measurements
 1st Semi-Annual Groundwater Monitoring Report
 Barelas Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Well ID	Date	Screen Interval (ft bgs)	Top of Casing Elevation (ft amsl)	Depth to Water (ft btoc)	Total Depth (ft btoc)	Potentiometric Surface Elevation (ft amsl) ¹
VP-5	3/7/1996	---	4943.52	8.55	NA	4934.97
	1/26/2000	---	4943.52	8.61	NA	4934.91
	4/26/2000	---	4943.52	8.17	NA	4935.35
	7/27/2000	---	4943.52	8.18	12.17	4935.34
	5/29/2001	---	4943.52	8.01	12.17	4935.51
	10/2/2001	---	4943.52	8.10	12.05	4935.42
	1/3/2002	---	4943.52	8.55	12.17	4934.97
	4/1/2002	---	4943.52	8.56	12.17	4934.96
	7/3/2002	---	4943.52	8.27	12.17	4935.25
	9/24/2002	---	4943.52	8.44	12.17	4935.08
	1/10/2003	---	4943.52	8.53	12.17	4934.99
	7/17/2003	---	4943.52	8.56	12.17	4934.96
	10/4/2006	---	4943.52	8.10	12.12	4935.42
	5/8/2009	---	4943.52	7.78	11.90	4935.74
	8/13/2011	---	4943.52	7.97	11.90	4935.55
	4/2/2013	---	4943.52	8.06	11.90	4935.46
	1/30/2014	---	4943.52	8.30	11.90	4935.22
	4/9/2014	---	4943.52	8.25	11.90	4935.27
	12/2/2014	---	4943.52	8.19	12.42	4935.33
	5/19/2015	---	4943.52	7.94	12.42	4935.58
1/12/2018	---	4943.52	7.90	12.42	4935.62	

Notes:

¹ = Value calculated from: Potentiometric Surface Elevation = Top of Casing Elevation - Depth to Water

amsl = above mean sea level

bgs = below ground surface

btoc = below top of casing

ft = feet

* Root ball obstruction in well

TABLE 2
Groundwater Quality Parameters
 1st Semi-Annual Groundwater Monitoring Report
 Barelas Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Well ID	Date	Parameter Monitoring Time	DTW (ft btoc)	Temperature		Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)
				°C	°F				
MW-4	12/2/2014	Initial	8.09	17.10	62.78	429	7.62	35.09	-37.5
		Final	8.12	18.48	65.26	486	7.21	3.27	-141.2
	5/19/2015	Initial	7.82	17.51	63.52	373	7.47	0.35	-99.0
		Final	7.87	17.02	62.64	409	7.38	0.08	-91.0
	1/12/2018	Initial	7.75	13.30	55.94	381	7.28	-	-
		Final	7.75	13.82	56.88	389	7.44	-	-
MW-7	12/2/2014	Initial	8.11	17.39	63.30	435	7.54	6.56	-202.0
		Final	8.14	17.68	63.82	452	7.62	2.09	-174.4
	5/19/2015	Initial	7.95	18.26	64.87	350	7.84	3.82	-114.2
		Final	7.91	16.75	62.15	333	7.86	3.64	-115.9
	1/12/2018	Initial	7.78	15.08	59.14	439	6.79	-	-
		Final	7.78	16.37	61.47	407	7.63	-	-
MW-8	12/2/2014	Initial	9.37	18.35	65.03	534	7.71	10.24	-157.5
		Final	9.40	18.98	66.16	605	7.47	3.93	-262.3
	5/19/2015	Initial	9.31	15.61	60.10	376	7.62	5.32	-54.1
		Final	9.22	15.11	59.20	423	7.66	4.88	-178.9
	1/12/2018	Initial	9.02	15.67	60.21	445	7.83	-	-
		Final	9.02	17.01	62.62	471	7.82	-	-
MW-9	12/2/2014	Initial	8.83	17.91	64.24	439	7.42	8.72	-149.2
		Final	8.85	17.93	64.27	431	7.36	3.03	-230.4
	5/19/2015	Initial	8.60	16.95	62.51	425	6.97	0.24	-158.9
		Final	8.62	16.21	61.18	340	7.35	0.05	-199.3
	1/12/2018	Initial	8.53	15.03	59.05	451	6.97	-	-
		Final	8.53	16.78	62.20	399	7.46	-	-
VP-2	12/2/2014	Initial	8.48	18.73	65.71	508	2.71	6.32	199.3
		Final	8.55	18.96	66.13	509	5.99	2.35	-120.7
	5/19/2015	Initial	8.23	17.35	63.23	344	6.91	0.24	-14.3
		Final	8.30	16.94	62.49	347	7.31	0.06	-98.6
	1/12/2018	Initial	8.15	15.24	59.43	388	6.96	-	-
		Final	8.15	16.32	61.38	399	7.49	-	-

TABLE 2
Groundwater Quality Parameters
 1st Semi-Annual Groundwater Monitoring Report
 Barelas Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Well ID	Date	Parameter Monitoring Time	DTW (ft btoc)	Temperature		Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)
				°C	°F				
VP-5	12/2/2014	Initial	8.20	17.87	64.17	817	6.90	3.96	-130.2
		Final	8.29	18.31	64.96	735	7.23	3.52	-200.5
	5/19/2015	Initial	7.94	17.63	63.73	621	7.11	0.22	-137.4
		Final	8.02	17.49	63.48	688	7.36	0.00	-257.8
	1/12/2018	Initial	7.90	14.66	58.39	577	7.24	-	-
		Final	7.90	15.39	59.70	507	7.49	-	-

Notes:

°C = degrees Celsius	DTW= Depth to water
°F = degrees Fahrenheit	ft = feet
µS/cm = microSiemens per centimeter	mg/L = milligrams per liter
btoc = below top of casing	mV = millivolts
DO = dissolved oxygen	ORP = oxidation reduction potential

TABLE 3
Laboratory Analytical Results - Groundwater
 1st Semi-Annual Groundwater Monitoring Report
 Barelás Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Sample ID	Date	Organics ¹									Inorganics ⁵		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX ²	MTBE	EDB ³	EDC	Total Naphthalenes ⁴	Dissolved Iron	Dissolved Manganese	Dissolved Lead
		Concentration (µg/L)									Concentration (mg/L)		
NMWQCC Standard		10	750	750	620	NE	100*	0.1	10	30	1.0	0.2	0.05
MW-4	10/30/1990	590	35.3	518	1,871	3,015	-	-	-	-	-	-	-
	11/29/1990	49	1.0	8.4	14	72	-	-	-	-	-	-	-
	3/7/1995	40	1.0	54	<2.0	95.0	NA	NA	NA	NA	-	-	-
	6/6/1995	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA	NA	-	-	-
	1/30/2000	5.4	<1.0	<1.0	2.6	8.0	<1.0	<1.0	<1.0	<2.0	-	-	-
	4/26/2000	2.9	<1.0	<1.0	<1.0	2.9	<1.0	<1.0	<1.0	<2.0	-	-	-
	7/27/2000	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<2.0	-	-	-
	2/6/2001	2.5	<1.0	<1.0	1.5	4.0	<1.0	<1.0	<1.0	3.9	1.19	1.76	<0.005
	5/29/2001	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<6.0	0.17	1.97	<0.005
	10/1/2001	<1.0	<1.0	<1.0	<3.0	<6.0	<1.0	<1.0	<1.0	<15.0	-	-	-
	1/3/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	4/1/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	7/3/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	9/24/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	1/10/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	7/17/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	0.010	<1.0	<10	-	-	-
	10/4/2006	<1.0	<1.0	<1.0	<3.0	<3.0	<1.5	-	-	<10	-	-	-
	5/8/2009	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<10	-	-	-
	8/13/2011	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<4.0	-	-	-
	4/2/2013	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<4.0	-	-	-
1/30/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<4.0	-	-	-	
4/9/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<4.0	-	-	-	
12/2/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<0.010	<1.0	2.1	0.60	0.78	<0.0050	
5/19/2015	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<0.010	<1.0	8.1	0.71	0.74	<0.0050	
1/12/2018	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<4.0	-	-	-	

TABLE 3
Laboratory Analytical Results - Groundwater
1st Semi-Annual Groundwater Monitoring Report
Barelas Bridge Site, Facility # 29854; Release ID # 54
Albuquerque, Bernalillo County, New Mexico

Sample ID	Date	Organics ¹									Inorganics ⁵		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX ²	MTBE	EDB ³	EDC	Total Naphthalenes ⁴	Dissolved Iron	Dissolved Manganese	Dissolved Lead
		Concentration (µg/L)									Concentration (mg/L)		
NMWQCC Standard		10	750	750	620	NE	100*	0.1	10	30	1.0	0.2	0.05
MW-7	10/30/1990	9.8	3	20.8	4.9	38.5	-	-	-	-	-	-	-
	9/20/1995	78	2.1	9.9	8.7	98.7	NA	NA	NA	NA	-	-	-
	12/5/1995	6.0	1.2	2.2	<2.0	9.4	NA	NA	NA	NA	-	-	-
	3/7/1996	1.9	<1.0	<1.0	<2.0	1.9	NA	NA	NA	NA	-	-	-
	10/2/2001	<1.0	<1.0	<1.0	3.3	3.3	<1.0	<1.0	<1.0	<15	-	-	-
	1/3/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	4/1/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	7/3/2002	2.6	<1.0	<1.0	3.0	5.6	<1.0	<1.0	<1.0	28.8	-	-	-
	9/24/2002	3.1	<1.0	<1.0	1.7	4.8	<1.0	<1.0	<1.0	22.8	-	-	-
	1/10/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	7/17/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	0.010	<1.0	<10	-	-	-
	10/4/2006	<1.0	<1.0	<1.0	<3.0	<3.0	<1.5	-	-	<10	-	-	-
	5/8/2009	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<10	-	-	-
	8/13/2011	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<4.0	-	-	-
	12/2/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<0.010	<1.0	<4.0	0.33	0.69	<0.0050
5/19/2015	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<0.010	<1.0	<4.0	0.29	0.61	<0.0050	
1/12/2018	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	<4.0	-	-	-	
MW-8	10/30/1990	220	120	960	1,140	-	-	-	-	-	-	-	-
	9/20/1995	11	19	190	74	294.0	NA	NA	NA	NA	-	-	-
	12/5/1995	8.6	8.3	49	18	83.9	NA	NA	NA	NA	-	-	-
	3/7/1996	71	24	400	150	645.0	NA	NA	NA	NA	-	-	-
	1/30/2000	<10	<10	150.0	5.7	155.7	<10	<10	<10	98	-	-	-
	4/26/2000	3.2	2.2	<1.0	35	40.4	<1.0	<1.0	<1.0	136	-	-	-
	7/27/2000	6.0	5.2	150	61	222.2	<1.0	<1.0	<1.0	140	-	-	-
	2/6/2001	<10	<10	130	43	173	<10	<10	<10	140	0.68	0.38	<0.005

TABLE 3
Laboratory Analytical Results - Groundwater
 1st Semi-Annual Groundwater Monitoring Report
 Barelás Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Sample ID	Date	Organics ¹									Inorganics ⁵		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX ²	MTBE	EDB ³	EDC	Total Naphthalenes ⁴	Dissolved Iron	Dissolved Manganese	Dissolved Lead
		Concentration (µg/L)									Concentration (mg/L)		
NMWQCC Standard		10	750	750	620	NE	100*	0.1	10	30	1.0	0.2	0.05
MW-8	5/29/2001	4.2	2.6	110	57	173.8	<2.0	<2.0	<2.0	261	1.12	0.36	<0.005
	10/2/2001	<10	<10	90	51	141	<10	<10	<10	120	-	-	-
	1/4/2002	3.0	3.2	35	50	91.2	<2.0	<2.0	<2.0	313	-	-	-
	4/1/2002	<5.0	<5.0	100	43	143	<5.0	<5.0	<5.0	273	-	-	-
	7/3/2002	<5.0	<5.0	86	40	126	<5.0	<5.0	<5.0	202	-	-	-
	9/24/2002	<5.0	<5.0	58	29	87	<5.0	<5.0	<5.0	238	-	-	-
	1/10/2003	<2.0	<2.0	57	38	95	<2.0	<2.0	<2.0	284	-	-	-
	7/17/2003	<5.0	<5.0	66	38	104	<5.0	0.010	<5.0	310	-	-	-
	10/4/2006	<2.0	<2.0	34	18	52	<3.0	-	-	210	-	-	-
	5/8/2009	<1.0	<1.0	24	8.0	32	<1.0	-	-	92	-	-	-
	8/13/2011	<10	<10	32	<15	32	<10	-	-	72	-	-	-
	4/2/2013	<5.0	<5.0	31	10	41	<5.0	-	-	149	-	-	-
	1/30/2014	1.3	1.4	33	8.2	44	<1.0	-	-	134	-	-	-
	4/9/2014	<1.0	1.2	32	7.3	41	<1.0	-	-	113	-	-	-
	12/2/2014	<5.0	<5.0	17	<7.5	17	<5.0	<0.010	<5.0	62	0.076	0.34	<0.0050
5/19/2015	<1.0	<1.0	22	4.4	26	<1.0	<0.010	<1.0	82	0.073	0.28	<0.0050	
1/12/2018	<1.0	<1.0	7.9	2.4	10.0	<1.0	<1.0	<1.0	56	-	-	-	
MW-9	9/20/1995	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA	NA	-	-	-
	12/5/1995	<0.5	<1.0	<1.0	14	14	NA	NA	NA	NA	-	-	-
	3/7/1996	<0.5	<1.0	<1.0	3.7	3.7	NA	NA	NA	NA	-	-	-
	1/3/2002	9.4	6.9	59	51	126.3	<1.0	<1.0	<1.0	2.7	-	-	-
	7/3/2002	5.1	1.9	16	18	41.0	<1.0	<1.0	<1.0	28.8	-	-	-
	9/24/2002	9.2	<1.0	25	20	54.2	1.7	<1.0	<1.0	13	-	-	-
	1/10/2003	2.2	<1.0	<1.0	<1.0	2.2	2.2	<1.0	<1.0	<10	-	-	-
	7/17/2003	98	9.9	2.4	10	120.3	7.1	0.010	<1.0	<10	-	-	-

TABLE 3
Laboratory Analytical Results - Groundwater
 1st Semi-Annual Groundwater Monitoring Report
 Barelás Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Sample ID	Date	Organics ¹									Inorganics ⁵		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX ²	MTBE	EDB ³	EDC	Total Naphthalenes ⁴	Dissolved Iron	Dissolved Manganese	Dissolved Lead
		Concentration (µg/L)									Concentration (mg/L)		
NMWQCC Standard		10	750	750	620	NE	100*	0.1	10	30	1.0	0.2	0.05
MW-9	10/4/2006	62	44	11	42	159	<1.5	-	-	6.9	-	-	-
	5/8/2009	12	7.1	45	68	132	<1.0	-	-	77	-	-	-
	8/13/2011	750	150	270	880	2,050	12	-	-	93	-	-	-
	4/2/2013	320	34	<10	150	504	<10	-	-	<40	-	-	-
	1/30/2014	190	59	200	340	789	<2.0	-	-	67	-	-	-
	4/9/2014	100	49	72	110	331	<1.0	-	-	32.4	-	-	-
	12/2/2014	6.4	<1.0	14	5.5	26	<1.0	<0.010	<1.0	2.3	0.31	0.81	<0.0050
	5/19/2015	21	3.0	18	18	60	<1.0	<0.010	<1.0	2.7	0.22	0.70	<0.0050
1/12/2018	4.0	1.4	11	11	27.0	<1.0	<1.0	<1.0	68	-	-	-	
VP-2	3/24/1994	32	20	94	150	296	NA	NA	NA	NA	-	-	-
	1/30/2000	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<2.0	-	-	-
	4/26/2000	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<2.0	-	-	-
	7/27/2000	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	11	-	-	-
	2/6/2001	<1.0	<1.0	<1.0	2.0	2.0	<1.0	<1.0	<1.0	13	0.70	0.92	<0.005
	5/29/2001	<1.0	<1.0	1.2	4.9	6.1	<1.0	<1.0	<1.0	36.7	0.83	1.21	<0.005
	10/1/2001	<1.0	<1.0	<1.0	<3.0	<6.0	<1.0	<1.0	<1.0	<15	-	-	-
	1/3/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	4/1/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	7/3/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	9/24/2002	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	3.4	-	-	-
	1/10/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<10	-	-	-
	7/17/2003	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	0.010	<1.0	<10	-	-	-
	10/4/2006	<1.0	<1.0	<1.0	<3.0	<3.0	<1.5	-	-	<10	-	-	-
	5/8/2009	<1.0	<1.0	1.3	1.6	2.9	<1.0	-	-	37.3	-	-	-
8/13/2011	<1.0	<1.0	2.1	2.4	4.5	<1.0	-	-	78	-	-	-	
4/2/2013	<2.0	<2.0	<2.0	<3.0	<3.0	<2.0	-	-	34.7	-	-	-	

TABLE 3
Laboratory Analytical Results - Groundwater
1st Semi-Annual Groundwater Monitoring Report
Barelas Bridge Site, Facility # 29854; Release ID # 54
Albuquerque, Bernalillo County, New Mexico

Sample ID	Date	Organics ¹									Inorganics ⁵		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX ²	MTBE	EDB ³	EDC	Total Naphthalenes ⁴	Dissolved Iron	Dissolved Manganese	Dissolved Lead
		Concentration (µg/L)									Concentration (mg/L)		
NMWQCC Standard		10	750	750	620	NE	100*	0.1	10	30	1.0	0.2	0.05
VP-2	1/30/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	2.2	-	-	-
	4/9/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	-	-	<4.0	-	-	-
	12/2/2014	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<0.010	<1.0	3.6	0.11	0.59	<0.0050
	5/19/2015	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<0.010	<1.0	<4.0	0.070	0.46	<0.0050
	1/12/2018	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<1.0	<1.0	11	-	-	-
VP-5	12/5/1995	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA	NA	-	-	-
	3/7/1996	9.5	<1.0	99	81	189.5	NA	NA	NA	NA	-	-	-
	1/30/2000	<5.0	<5.0	20	10	30.0	<5.0	<5.0	<5.0	80	-	-	-
	4/26/2000	<1.0	1.4	14	7.1	22.5	<1.0	<1.0	<1.0	142	-	-	-
	7/27/2000	<1.0	1.8	20	12	33.8	<1.0	<1.0	<1.0	89	-	-	-
	5/29/2001	<1.0	1.2	21	17	39.2	<1.0	<1.0	<1.0	330	3.42	0.53	<0.005
	10/2/2001	<5.0	<5.0	44	35	79	<5.0	<5.0	<5.0	320	-	-	-
	1/3/2002	<5.0	<5.0	50	31	81	<5.0	<5.0	<5.0	340	-	-	-
	4/1/2002	<1.0	<1.0	100	44	144	<1.0	<1.0	<1.0	640	-	-	-
	7/3/2002	<5.0	<5.0	32	19	51	<5.0	<5.0	<5.0	350	-	-	-
	9/24/2002	<5.0	<5.0	34	18	52	<5.0	<5.0	<5.0	510	-	-	-
	1/10/2003	<5.0	<5.0	61	27	88	<5.0	<5.0	<5.0	510	-	-	-
	7/17/2003	<5.0	<5.0	110	54	164	<5.0	0.010	<5.0	930	-	-	-
	10/4/2006	<10	<10	21	<30	21.0	<15	-	-	430	-	-	-
	5/8/2009	<5.0	<5.0	7.1	<7.5	7.1	<5.0	-	-	386	-	-	-
	8/13/2011	1.4	1.8	12	2.4	17.6	<1.0	-	-	469	-	-	-
	4/2/2013	<2.0	<2.0	7.7	<3.0	7.7	<2.0	-	-	270	-	-	-
1/30/2014	<1.0	1.0	3.0	<1.5	4.0	<1.0	-	-	187	-	-	-	
4/9/2014	<1.0	1.2	4.5	<1.5	5.7	<1.0	-	-	217	-	-	-	

TABLE 3
Laboratory Analytical Results - Groundwater
 1st Semi-Annual Groundwater Monitoring Report
 Barelás Bridge Site, Facility # 29854; Release ID # 54
 Albuquerque, Bernalillo County, New Mexico

Sample ID	Date	Organics ¹									Inorganics ⁵		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX ²	MTBE	EDB ³	EDC	Total Naphthalenes ⁴	Dissolved Iron	Dissolved Manganese	Dissolved Lead
		Concentration (µg/L)									Concentration (mg/L)		
NMWQCC Standard		10	750	750	620	NE	100*	0.1	10	30	1.0	0.2	0.05
VP-5	12/2/2014	<5.0	<10	<10	<15	<15	<10	<0.010	<5.0	280	1.0	0.12	<0.0050
	5/19/2015	<5.0	<5.0	<5.0	<7.5	<7.5	<5.0	<0.010	<5.0	200	1.2	0.12	0.0061
	1/12/2018	<2.0	<2.0	<2.0	<3.0	<3.0	<2.0	<2.0	<2.0	95	-	-	-

Notes:

* = New Mexico Environment Department--Petroleum Storage Tank Bureau Action Level

- = Not Tested or Not Applicable

Bolding indicates values or RLs in excess of the NMWQCC Standard or Petroleum Storage Tank Bureau Action Level.

¹ = Analyzed by U.S. EPA Method 8260B.

² = Total BTEX includes sum of benzene, toluene, ethylbenzene, and total xylenes. RL for BTEX = highest RL for individual compounds; when summing detections, values listed as "<" RL are assumed to be 0.

³ = Analyzed by U.S. EPA Method 504.1 or 8260B.

⁴ = Total naphthalenes includes the sum of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. RL for Total Naphthalenes = highest RL for individual compounds; when summing detections, values listed as "<" RL are assumed to be 0.

⁵ = Analyzed by U.S. EPA Method 6010.B.

BTEX = benzene, toluene, ethyl benzene, and total xylenes

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

µg/L = microgram(s) per liter

mg/L = milligrams per liter

MTBE = methyl tertiary-butyl ether

NE = None Established

NMWQCC = New Mexico Water Quality Control Commission

NMWQCC Standard = Groundwater Standards as defined by the State of New Mexico Water Quality Control Commission (NMWQCC, 2002)

RL = Laboratory reporting limit

APPENDIX A
Access Agreement

5052462600

CONSENT FOR ACCESS TO PROPERTY

Name of Property Owner: Roberts Oil Co

Location of Property: 800 Bridge SW, Albuquerque, New Mexico

This is my consent to the New Mexico Environment Department (Department) and its authorized officers, employees, contractors, and representatives for access to the above-described Property for the following purposes:

- Collect groundwater samples from Site monitoring wells as part of groundwater monitoring activities.

The Department or its representative will provide the Property Owner written or oral notice prior to each entrance onto Property. This notice shall be given to:

Roberts Oil Co
 408 Arizona Street SE
 Albuquerque
 New Mexico
 87108
 505.262.1607

Property Owner may observe activities on the Property, consistent with Occupational Health and Safety Regulations (see 29 CFR § 1910.120) and may split all samples collected at the Property. Property Owner is responsible for the provision of all equipment and accessories and for laboratory costs necessary to split samples.

Installations on the Property will be placed to minimize interference with the movement of vehicles and regular activities on the Property. Following completion of the project, the Department or its representative will properly abandon all wells, remove equipment, all materials, trash, fencing, and other associated items. The Department or its representative will otherwise return the property as close as possible to the pre-entrance condition.

This permission is given by me voluntarily with knowledge of my right to refuse and without coercion. I have had an opportunity to ask questions and all my questions have been answered to my satisfaction.


Signature Property Owner

11-21-14
Date

APPENDIX B

Field Notes and Groundwater Sampling Forms

5/19/15 2nd Semi Annual GW Sampling AKA

1505 Setup at MW-7

Para^m Stable Parameters:

Time: 1535

DO: 3.64 mg/L

Pump Rate: 0.34/min

ORP: -115.9 mV

Water Level: 7.91' bgs

SpC: 333 μ S/cm

Pump: 3.4L

pH: 7.86

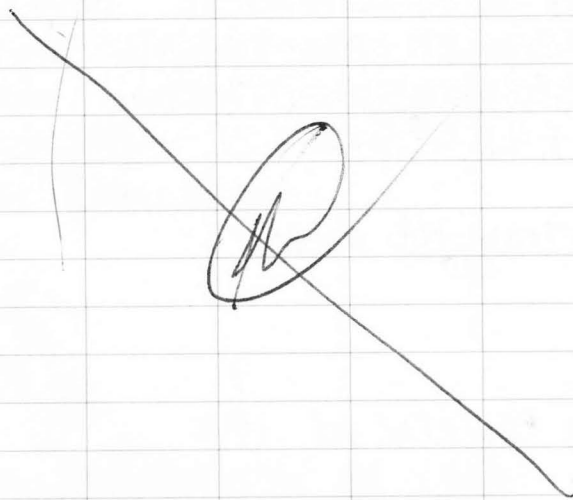
Temp: 16.75 °C

Note: clear / MC odor

1538 Sample collected.

All samples put in an ice chilled cooler immediately after collection.

1600 AKA offsite to deliver samples.



1/12/18 1st Semi Annual GW Sampling

8:00 MG outside.

0815 locate all wells and speak to station manager about job activities.

830 Hr S (Green) - traffic, alone, well vault

- wear high vis - gloves.

- Fill out health + safety form

Objective: gauge + sample 6 monitoring wells. Collect GW samples for 8260 D.

8:45 - Calibrate YSF, pH + spec. cond.

9:15 - Begin gauging wells.

well ID	Time	DTP	DTW	Notes
MW-7	9:15	-	7.78	Grass
MW-9	9:18	-	8.53	Di-ty
MW-4	9:25	-	7.75	Grass
MW-2	9:38	-	8.15	-
MW-8	9:41	-	9.02	-
VP-5	9:45	-	7.90	Di-ty

9:45 Begin purging + sampling MW-7.
See field form

11/2/18 1st Semi annual Sampling MW

Stable parameters for MW-7 =

Time	Temp	pH	Sp Cond	Vol
10:20	16.37	7.63	407	2.1 gallons

- grey water w/ grass blades in water.

Collect Sample 1030

1030 Attempt to get sand ball blockage out. Seems to be pushing it down. Blockage around 11 ft. Not able to hook it.

10:40 Begin Purging + Sampling MW-4

Stable Parameters

Time	Temp	pH	Sp Cond.	Vol
10:55	13.82	7.44	389	2.50

Collect Sample 1105

1110 Begin purging + Sampling ~~MW-3~~ VP-2.

Stable Parameters

Time	Temp	pH	Sp Cond	Vol
1140	16.32	7.49	399	3 gallons

Collect Sample 1145

1150 Begin purging + Sampling MW-8

Stable Parameters

Time	Temp	pH	Sp Cond	Vol
1215	17.01	7.82	471	2.5g

Collect Sample 1220

11/2/18 1st Semi annual Sampling

1240 Difficulty getting well tops back on uawts, there is a small tub to place in get them close tops.

1300 Need more sampling time

1330 Back on site after locating some twine.

1340 Set up on VP-5 to start purging and sampling.

Stable Parameters

Time	Temp	pH	Sp Cond.	Vol
1400	15.39	7.49	507	2.5g

Sample collected at 1415.

1430 Set up on MW-9 to start purging and sampling.

Stable Parameters

Time	Temp	pH	Sp Cond	Vol
1530	16.78	7.46	399	5.5

Sample collected at 1545.

1600 Off site for lab.

~~Shirley~~

FIELD GROUNDWATER SAMPLING FORM (PURGING)

Site Name: Barelas Bridge Well/Sampling Point ID: MW-7
 Project # _____ Groundwater Sample ID: _____
 Date: 1/12/18 Duplicate Sample ID: _____

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
---	----	---	----	---	-----------	---	----	--------------	--------	-------

WEATHER: Sunny TEMP: 38 °F

WATER LEVEL & WATER COLUMN HEIGHT

Time	Depth to Well Bottom (DTB) (ft, btoc)	Depth to Water (DTW) (ft, btoc)	Water Column Height (DTB-DTW) (ft)
:	21.66	7.78	13.88

ft, btoc = feet below top of casing (north side of casing)

PURGE VOLUME

Well Casing Diam. (inches)	Volume/Linear Foot (see conversions below)	1 Well Volume* (gallons)	2 Well Volumes (gallons)	3 Well Volumes (gallons)
2"				7.07

PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

WELL PURGE WATER QUALITY

Time	Temp (°C)	pH	Sp. Cond (uS/cm)	DO (mg/L)	ORP (mV)	Vol. (gals)	Visual/Odor
945	15.08	6.79	499	X	X	1.5	Grey / H ₂ S odor, grass
950	16.22	7.31	409			2.5	Grey / H ₂ S odor, grass
1000	16.25	7.32	396			3.5	Grey / H ₂ S odor
1005	16.31	7.59	482			4.5	Grey / H ₂ S odor
1010	16.27	7.59	412			5.5	Grey / H ₂ S odor
1015	16.41	7.61	419			6.5	Grey / H ₂ S odor
1020	16.37	7.63	407			7.1	Grey / H ₂ S odor

Stabilization = Temp. ±1°C, pH ±0.2 units, Sp. Cond. ±10%

Purge Equipment Used (peristaltic pump, bailer, etc): Bailer

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Analytical Method	# of Bottles	Volume	Preservative
VOL	1/12/18	1030	8260	3	40 ml	HgCl ₂

TOTAL:

Sampling Equipment Used: Bailer

SAMPLER: Mike Gerber (PRINTED NAME) Mike Gerber (SIGNATURE)

FIELD GROUNDWATER SAMPLING FORM (PURGING)

Site Name: Bavela Bridge Well/Sampling Point ID: MW-4
 Project #: _____ Groundwater Sample ID: 11
 Date: 1/12/18 Duplicate Sample ID: 1

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
---	----	---	----	---	----	---	----	-------	--------	-------

WEATHER:

<u>Sunny / partly cloudy</u>

TEMP	<u>35 °F</u>
------	--------------

WATER LEVEL & WATER COLUMN HEIGHT

Time	Depth to Well Bottom (DTB) (ft, btoc)	Depth to Water (DTW) (ft, btoc)	Water Column Height (DTB-DTW) (ft)
<u>10:35</u>	<u>10.60</u>	<u>7.75</u>	<u>2.85</u>

ft, btoc = feet below top of casing (north side of casing)

PURGE VOLUME

Well Casing Diam. (inches)	Volume/Linear Foot (see conversions below)	1 Well Volume* (gallons)	2 Well Volumes (gallons)	3 Well Volumes (gallons)
<u>2"</u>				<u>1.45</u>

PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

<u>1" = 0.04</u>	<u>1.5" = 0.09</u>	<u>2" = 0.17</u>	<u>3" = 0.38</u>	<u>4" = 0.66</u>	<u>6" = 1.5</u>	<u>8" = 2.6</u>	<u>10" = 4.1</u>
------------------	--------------------	------------------	------------------	------------------	-----------------	-----------------	------------------

1 well casing volume = Volume/Linear Foot x Water Column Height

WELL PURGE WATER QUALITY

Time	Temp (°C)	pH	Sp. Cond (uS/cm)	DO (mg/L)	ORP (mV)	Vol. (gals)	Visual/Odor
<u>10:40</u>	<u>13.30</u>	<u>7.28</u>	<u>381</u>	 	 	<u>0.5</u>	<u>Dark brown / sewer odor</u>
<u>10:45</u>	<u>15.52</u>	<u>7.42</u>	<u>394</u>			<u>1.0</u>	<u>" "</u>
<u>10:50</u>	<u>14.94</u>	<u>7.48</u>	<u>379</u>			<u>1.25</u>	<u>" "</u>
<u>10:55</u>	<u>14.67</u>	<u>7.43</u>	<u>390</u>			<u>1.50</u>	<u>" "</u>
<u>11:00</u>	<u>19.75</u>	<u>7.41</u>	<u>392</u>			<u>2.00</u>	<u>" "</u>
<u>11:05</u>	<u>19.82</u>	<u>7.44</u>	<u>389</u>			<u>2.50</u>	<u>" "</u>
						<u>Grass and blockage in well.</u>	

Stabilization = Temp. ±1°C, pH ±0.2 units, Sp. Cond. ±10%

Purge Equipment Used (peristaltic pump, bailer, etc): Bailer

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Analytical Method	# of Bottles	Volume	Preservative
<u>VOAS</u>	<u>1/12/18</u>	<u>11:05</u>	<u>8260</u>	<u>3</u>	<u>40 ml</u>	<u>HgCl2</u>

TOTAL:

--

Sampling Equipment Used: Bailer

SAMPLER: Michael Gurber Michael Gurber
 (PRINTED NAME) (SIGNATURE)

FIELD GROUNDWATER SAMPLING FORM (PURGING)

Site Name: Barelas Bridge Well/Sampling Point ID: VP-2
 Project # _____ Groundwater Sample ID: _____
 Date: 1/12/18 Duplicate Sample ID: _____

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
---	----	---	----	---	----	---	----	-------	--------	-------

WEATHER: Sunny TEMP: 45 °F

WATER LEVEL & WATER COLUMN HEIGHT

Time	Depth to Well Bottom (DTB) (ft, btoc)	Depth to Water (DTW) (ft, btoc)	Water Column Height (DTB-DTW) (ft)
11:10	12.80	8.15	4.65

ft, btoc = feet below top of casing (north side of casing)

PURGE VOLUME

Well Casing Diam. (inches)	Volume/Linear Foot (see conversions below)	1 Well Volume* (gallons)	2 Well Volumes (gallons)	3 Well Volumes (gallons)
2"				2.3715

PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

WELL PURGE WATER QUALITY

Time	Temp (°C)	pH	Sp. Cond (uS/cm)	DO (mg/L)	ORP (mV)	Vol. (gals)	Visual/Odor
1115	15.24	6.96	388	X	X	0.5	air-y / slight HC
1120	16.02	7.14	400			1.0	brown / HC odor
1125	16.30	7.46	389			1.5	" "
1130	16.38	7.55	393			2.0	" "
1135	16.37	7.51	395			2.5	" "
1140	16.32	7.49	399			3.0	" "

Stabilization = Temp. $\pm 1^{\circ}\text{C}$, pH ± 0.2 units, Sp. Cond. $\pm 10\%$

Purge Equipment Used (peristaltic pump, bailer, etc): Bailer

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Analytical Method	# of Bottles	Volume	Preservative
Voa	1/12/18	1145	8260	3	40ml	Hg Cl2

TOTAL: 3

Sampling Equipment Used: Bailer

SAMPLER: Mike Gerber (PRINTED NAME) Mike Gerber (SIGNATURE)

FIELD GROUNDWATER SAMPLING FORM (PURGING)

Site Name: Barclay Bridge Well/Sampling Point ID: MW-8
 Project # _____ Groundwater Sample ID: _____
 Date: 1/12/18 Duplicate Sample ID: _____

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
---	----	---	----	---	----	---	----	-------	--------	-------

WEATHER:

Sunny

TEMP	48 °F
------	-------

WATER LEVEL & WATER COLUMN HEIGHT

Time	Depth to Well Bottom (DTB) (ft, btoc)	Depth to Water (DTW) (ft, btoc)	Water Column Height (DTB-DTW) (ft)
11:50	13.3	9.02	4.28

ft, btoc = feet below top of casing (north side of casing)

PURGE VOLUME

Well Casing Diam. (inches)	Volume/Linear Foot (see conversions below)	1 Well Volume* (gallons)	2 Well Volumes (gallons)	3 Well Volumes (gallons)
2"				2.2

PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

WELL PURGE WATER QUALITY

Time	Temp (°C)	pH	Sp. Cond (uS/cm)	DO (mg/L)	ORP (mV)	Vol. (gals)	Visual/Odor
1155	15.67	7.83	445	X	X	0.5	Clear (strong HC)
1200	17.04	7.83	452			1.0	"
1205	17.11	7.86	469			1.5	"
1210	16.88	7.85	480			2.0	"
1215	17.01	7.82	471			2.5	"

Stabilization = Temp. ±1°C, pH ±0.2 units, Sp. Cond. ±10%

Purge Equipment Used (peristaltic pump, bailer, etc): Bailer

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Analytical Method	# of Bottles	Volume	Preservative
Voa	1/12/18	1220	8260	3	40 ml	Hg Cl ₂

TOTAL:

3

Sampling Equipment Used: Bailer
 SAMPLER: Mike Gerber Michael Mader
 (PRINTED NAME) (SIGNATURE)

FIELD GROUNDWATER SAMPLING FORM (PURGING)

Site Name: Barclay Bridge
 Project # _____
 Date: 1/12/18

Well/Sampling Point ID: VP-5
 Groundwater Sample ID: _____
 Duplicate Sample ID: _____

WIND FROM:

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
---	----	---	----	---	-----------	---	----	-------	--------	-------

WEATHER:

<u>Sunny</u>

TEMP:

50	°F
----	----

WATER LEVEL & WATER COLUMN HEIGHT

Time	Depth to Well Bottom (DTB) (ft, btoc)	Depth to Water (DTW) (ft, btoc)	Water Column Height (DTB-DTW) (ft)
13:30	12.82	7.90	4.52

ft, btoc = feet below top of casing (north side of casing)

PURGE VOLUME

Well Casing Diam. (inches)	Volume/Linear Foot (see conversions below)	1 Well Volume* (gallons)	2 Well Volumes (gallons)	3 Well Volumes (gallons)
2"				2.31

PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

WELL PURGE WATER QUALITY

Time	Temp (°C)	pH	Sp. Cond (uS/cm)	DO (mg/L)	ORP (mV)	Vol. (gals)	Visual/Odor
1340	14.66	7.24	577	X	X	0.5	Grey/HC odor
1345	15.04	7.27	547			1.0	" "
1350	15.31	7.41	512			1.5	" "
1355	15.33	7.48	512			2.0	" "
1400	15.39	7.49	507			2.5	" "

Stabilization = Temp. ±1°C, pH ±0.2 units, Sp. Cond. ±10%

Purge Equipment Used (peristaltic pump, bailer, etc): Bailer

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Analytical Method	# of Bottles	Volume	Preservative
Voa	1/12/18	1415	8260	3	40 ml	HgCl ₂

TOTAL:

3

Sampling Equipment Used: Bailer

SAMPLER: Mike Gerber (PRINTED NAME) Mike Gerber (SIGNATURE)

FIELD GROUNDWATER SAMPLING FORM (PURGING)

Site Name: Barcelona Bridge
Project # _____
Date: 1/12/18

Well/Sampling Point ID: MW-9
Groundwater Sample ID: _____
Duplicate Sample ID: _____

WIND FROM: N | NE | E | SE | S | **SW** | W | NW | **LIGHT** | MEDIUM | HEAVY

WEATHER: Sunny

TEMP: 55 °F

WATER LEVEL & WATER COLUMN HEIGHT

Time	Depth to Well Bottom (DTB) (ft, btoc)	Depth to Water (DTW) (ft, btoc)	Water Column Height (DTB-DTW) (ft)
14:30	19.28	8.53	10.75

ft, btoc = feet below top of casing (north side of casing)

PURGE VOLUME

Well Casing Diam. (inches)	Volume/Linear Foot (see conversions below)	1 Well Volume* (gallons)	2 Well Volumes (gallons)	3 Well Volumes (gallons)
				5.5

PURGE VOLUME CONVERSIONS (Use Well Casing diameter to determine Volume/Linear Foot)

1" = 0.04	1.5" = 0.09	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.5	8" = 2.6	10" = 4.1
-----------	-------------	-----------	-----------	-----------	----------	----------	-----------

1 well casing volume = Volume/Linear Foot x Water Column Height

WELL PURGE WATER QUALITY

Time	Temp (°C)	pH	Sp. Cond (uS/cm)	DO (mg/L)	ORP (mV)	Vol. (gals)	Visual/Odor
1445	15.03	6.97	451	X	X	1.0	Grey / Hk odor
1455	16.81	7.24	397			2.0	" "
1505	16.76	7.23	413			3.0	" "
1515	16.49	7.34	416			4.0	" "
1525	16.67	7.45	402			5.0	" "
1530	16.78	7.46	399			5.5	" "

Stabilization = Temp. ±1°C, pH ±0.2 units, Sp. Cond. ±10%

Purge Equipment Used (peristaltic pump, bailer, etc): Bailer

GROUNDWATER SAMPLING DATA

Bottle Type	Date	Time	Analytical Method	# of Bottles	Volume	Preservative
Voa	1/12/18	1545	8260	3	40 mL	H ₂ Cl ₂

TOTAL: 3

Sampling Equipment Used: Bailer

SAMPLER: Mike Gerber (PRINTED NAME) [Signature] (SIGNATURE)

APPENDIX C
Historical Fluid Levels and
Groundwater Chemistry Data

TABLE 1

**NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
800 BRIDGE STREET S.W. SITE
GROUND-WATER LEVELS**

DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8
10/31/90	4933.50	4933.35	4933.37	4934.67	4934.28	4934.15	4934.58	4934.98
11/14/90	4933.31	4933.15	4933.13	4934.55	4934.09	4934.02	4934.45	4934.92
11/28/90	4933.08	4932.91	4932.93	4934.56	4933.62	4933.54	4934.04	4934.76
11/29/90	4933.05	4932.94	4932.91	4934.53	4933.60	4933.53	4934.03	4934.75
12/12/90	4933.04	4932.92	4932.89	4934.50	4933.58	4933.51	4934.11	4934.71

TABLE 2

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
 RECORDS OF WATER QUALITY
 COLLECTED BY LEGGETTE, BRASHEARS & GRAHAM, INC.
 800 BRIDGE SITE

DATE	SAMPLE NO.	PPB	PPB	PPB	PPB	PPB	PPM
		BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	MTBE	TVH
10/5/90	TAP WATER 140 LaVega	U	U	U	U		U
10/5/90	TAP WATER 152 LeVega	U	U	U	U		U
10/11/90	TRIP BLANK	U	U	U	1.6	U	U
10/15/90	AH-1	2	1.8	U	U	U	U
10/15/90	AH-2	2600*	1400*	1900*	14000*	U	73.6
10/15/90	AH-3	1.5	0.6	1.4	0.8	U	1
10/15/90	AH-4	23*	18	150	22	U	15.7
10/15/90	TRIP BLANK	U	U	0.7	3	U	U
10/16/90	AH-5	23*	0.8	0.7	10	U	1
10/30/90	MW-1	2.6	0.5	U	1.7		U
10/30/90	MW-2	U	0.2	U	1		U
10/30/90	MW-3	U	0.4	U	1.3		U
10/30/90	MW-4	590*	35.3	518.4	1871.1*		5
10/30/90	MW-5	U	0.5	U	1.5		U
10/30/90	MW-6	10.7*	33.3	32.7	175.5		4
10/30/90	MW-7	9.8	3	20.8	4.9		1
10/30/90	MW-8	220*	120	960*	1140*		9
10/30/90	FIELD BLANK	U	0.5	U	0.8		U
10/30/90	TRIP BLANK	U	0.7	U	1.5		U
10/31/90	TAP WATER 153 LaVega	U	0.6	U	2		U
11/27/90	TRIP BLANK	U	U	U	U		
11/28/90	MW-2	U	1.1	U	0.6		0.7
11/29/90	MW-4	49	1	8.4	14		0.9
NMEID Action Levels		10	750	750	620	100	

* Concentration is above NMEID action level

U = Undetected

ppb = Parts per billion

ppm = Parts per million

TVH = Total volatile hydrocarbons

TABLE 3

**NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RECORDS OF WATER QUALITY SAMPLES
COLLECTED BY ALBUQUERQUE ENVIRONMENTAL HEALTHY DEPARTMENT
800 BRIDGE STREET SW**

SAMPLE DATE	LOCATION	PPB	PPB	PPB	PPB	PPM	PPM	PPM	PPM
		BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	IRON	MANGANESE	LEAD	ZINC
8/8/89	NW 800 BRDG	10*	190	0	2				
8/8/89	NE 800 BRDG	70*	220	68	44				
8/8/89	SW 800 BRDG	U	250	U	U				
8/8/89	SE 800 BRDG	500*	120	930*	370				
	A-1	1	U	U	U				
9/12/89	A-2	5700*	4100*	29000*	20700*	10.2*	1.78*	0.011	0.082
9/12/89	A-3	2.6	4.1	25	18.9	U	1.12*	U	0.02
9/12/89	A-4	U	U	U	U				
9/13/89	A-5	10000*	7000*	14500*	40500*				
9/13/89	A-6	1650*	160	1620*	930*				
9/26/89	A-7	3900*	7500*	9700*	30500*	12.5*	1.55*	0.026	0.052
9/26/89	A-8	160*	490	2100*	9500*	7.5*	0.601*	0.029	0.051
9/27/89	A-9	26*	5	8.8	7.4	0.568	1.14*	U	0.019
10/11/89	A-11	7700*	2800*	5700*	19000*	12.2*	1.35*	0.018	0.071
10/11/89	A-12	U	U	U	U	0.423	0.36*	U	0.013
10/10/89	A-13	2000*	U	U	U	6.96*	0.992*	0.012	0.034
11/8/89	A-14	U	U	U	U	0.859	0.451*	U	0.018
11/8/89	A-15	300*	U	U	U	2.45*	1.08*	0.003	0.021
11/8/89	A-16	U	U	U	U	0.289	0.41	U	U
2/19/90	MW-1	4.8	7.2	U	U				
2/19/90	MW-2	5.7	7.2	U	U				
2/19/90	MW-3	U	2.6	U	U				
2/19/90	MW-4	190*	25	280	865*				
9/13/89	145 LA VEGA	U	U	U	U				
8/10/89	183 RIVERSIDE	U	U	U	U				
8/11/89	183 RIVERSIDE	U	U	U	U				
10/4/89	154 LA VEGA	U	U	U	U				
10/4/89	152 LA VEGA	U	U	U	U				
10/16/89	153 LA VEGA	U	U	U	U				

NMEID Action Levels 10 750 750 620 1 0.2 0.05 10

* Concentration is above NMEID Action Level

U = Undetected

Ppb = Parts per billion

Ppm = Parts per million

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.

GROUND WATER ELEVATION DATA
 TABLE 1

MONITOR WELL NUMBER	DATE	CASING RIM ELEVATION (FEET)	DEPTH TO BOTTOM (FEET)	BOTTOM OF CASING ELEVATION (FEET)	DEPTH TO GROUND WATER (FEET)	DEPTH TO PRODUCT (FEET)	PRODUCT THICKNESS (FEET)	WATER COLUMN THICKNESS (FEET)	POTENTIOMETRIC SURFACE ELEVATION (FEET)
MW-1	01/06/00	4942.99	8.24	4934.75	Dry	NA	NA	Dry	Dry
MW-2	05/30/03 01/06/00	Plugged and Abandoned 4942.47	5.94	4936.53	Dry	NA	NA	Dry	Dry
MW-3	05/30/03 01/26/00 01/06/00 03/07/96	Appears to be plugged and abandoned before May 2003		4921.56	8.65 8.59 8.51	NA NA NA	NA NA NA	11.82 11.88 11.96	4933.38 4933.44 4933.52
MW-4	07/17/03 01/10/03 09/24/02 07/03/02 04/01/02 01/03/02 10/01/01 05/29/01 02/06/01 07/27/00 04/26/00 01/26/00 01/06/00 03/07/96	4943.23	16.50	4926.73	8.45 8.35 8.33 8.30 8.48 8.43 8.00 8.08 8.19 9.04 9.16 8.65 8.51 8.48	NA NA NA NA NA NA NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA NA NA NA NA NA NA	8.05 8.15 8.17 8.20 8.02 8.07 8.50 8.40 8.29 7.44 7.32 7.83 7.97 8.00	4934.78 4934.88 4934.90 4934.93 4934.75 4934.80 4935.23 4935.15 4935.04 4934.19 4934.07 4934.58 4934.72 4934.75
MW-5	05/30/03 01/26/00 01/06/00 03/07/96	Plugged and Abandoned 4942.18	21.48	4920.70	8.23 8.14 8.07	NA NA NA	NA NA NA	13.25 13.34 13.41	4933.95 4934.04 4934.11

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.

GROUND WATER ELEVATION DATA
 TABLE 1

MONITOR WELL NUMBER	DATE	CASING RIM ELEVATION (FEET)	DEPTH TO BOTTOM (FEET)	BOTTOM OF CASING ELEVATION (FEET)	DEPTH TO GROUND WATER (FEET)	DEPTH TO PRODUCT (FEET)	PRODUCT THICKNESS (FEET)	WATER COLUMN THICKNESS (FEET)	POTENTIOMETRIC SURFACE ELEVATION (FEET)
MW-6	05/30/03	Plugged and Abandoned							
	01/26/00	4944.59	13.16	4931.43	8.36	NA	NA	4.80	4936.23
	01/06/00	4944.59	13.16	4931.43	9.37	NA	NA	3.79	4935.22
	03/07/96	4944.59	13.16	4931.43	9.22	NA	NA	3.94	4935.37
MW-7	07/17/03	4942.94	21.45	4921.49	8.53	NA	NA	12.92	4934.41
	01/10/03	4942.94	21.45	4921.49	8.45	NA	NA	13.00	4934.49
	09/24/02	4942.94	21.45	4921.49	8.45	NA	NA	13.00	4934.49
	07/03/02	4942.94	21.45	4921.49	8.40	NA	NA	13.05	4934.54
	04/01/02	4942.94	21.45	4921.49	8.66	NA	NA	12.79	4934.28
	01/03/02	4942.94	21.45	4921.49	8.50	NA	NA	12.95	4934.44
	10/02/01	4942.94	21.45	4921.49	8.20	NA	NA	13.25	4934.74
	03/07/96	4942.94	21.45	4921.49	8.61	NA	NA	12.84	4934.33
MW-8	07/17/03	4944.59	13.16	4931.43	9.71	NA	NA	3.45	4934.88
	01/10/03	4944.59	13.16	4931.43	9.68	NA	NA	3.48	4934.91
	09/24/02	4944.59	13.16	4931.43	9.61	NA	NA	3.55	4934.98
	07/03/02	4944.59	13.16	4931.43	9.53	NA	NA	3.63	4935.06
	04/01/02	4944.59	13.16	4931.43	9.73	NA	NA	3.43	4934.86
	01/04/02	4944.59	13.16	4931.43	9.63	NA	NA	3.53	4934.96
	10/02/01	4944.59	13.16	4931.43	9.35	NA	NA	3.81	4935.24
	05/29/01	4944.59	13.16	4931.43	9.32	NA	NA	3.84	4935.27
	02/06/01	4944.59	13.16	4931.43	9.41	NA	NA	3.75	4935.18
	07/27/00	4944.59	13.16	4931.43	9.32	NA	NA	3.84	4935.27
	04/26/00	4944.59	13.16	4931.43	9.40	NA	NA	3.76	4935.19
	01/26/00	4944.59	13.16	4931.43	9.82	NA	NA	3.34	4934.77
	01/06/00	4944.59	13.16	4931.43	9.82	NA	NA	3.34	4934.77
	03/07/96	4944.59	13.16	4931.43	9.74	NA	NA	3.42	4934.85

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.

GROUND WATER ELEVATION DATA
 TABLE 1

MONITOR WELL NUMBER	DATE	CASING RIM ELEVATION (FEET)	DEPTH TO BOTTOM (FEET)	BOTTOM OF CASING ELEVATION (FEET)	DEPTH TO GROUND WATER (FEET)	DEPTH TO PRODUCT (FEET)	PRODUCT THICKNESS (FEET)	WATER COLUMN THICKNESS (FEET)	POTENTIOMETRIC SURFACE ELEVATION (FEET)
MW-9	07/17/03	4943.98	19.43	4924.55	9.22	NA	NA	10.21	4934.76
	01/10/03	4943.98	19.43	4924.55	9.15	NA	NA	10.28	4934.83
	09/24/02	4943.98	19.43	4924.55	9.10	NA	NA	10.33	4934.88
	07/03/02	4943.98	19.43	4924.55	9.00	NA	NA	10.43	4934.98
	01/26/00	4943.98	19.43	4924.55	9.31	NA	NA	10.12	4934.67
	01/06/00	4943.98	19.43	4924.55	9.30	NA	NA	10.13	4934.68
	03/07/96	4943.98	19.43	4924.55	9.26	NA	NA	10.17	4934.72
VP-1	05/30/03	Plugged and Abandoned							
	04/01/02	4943.75	13.95	4929.79	8.65	NA	NA	5.30	4935.10
	01/03/02	4943.75	13.95	4929.79	8.50	NA	NA	5.45	4935.25
	10/01/01	4943.75	13.96	4929.79	8.10	NA	NA	5.86	4935.65
	05/29/01	4943.75	13.96	4929.79	8.17	NA	NA	5.79	4935.58
	02/06/01	4943.75	13.96	4929.79	8.29	NA	NA	5.67	4935.46
	07/27/00	4943.75	13.96	4929.79	8.28	NA	NA	5.68	4935.47
	04/26/00	4943.75	13.96	4929.79	8.28	NA	NA	NA	4935.47
	01/26/00	4943.75	13.96	4929.79	NM	NA	NA	NA	NA
	01/06/00	4943.75	13.96	4929.79	8.64	NA	NA	5.32	4935.11
01/10/96	4943.75	13.96	4929.79	8.57	NA	NA	5.39	4935.18	
VP-2	07/17/03	4943.73	12.57	4931.16	8.81	NA	NA	3.76	4934.92
	01/10/03	4943.73	12.57	4931.16	8.83	NA	NA	3.74	4934.90
	09/24/02	4943.73	12.57	4931.16	8.73	NA	NA	3.84	4935.00
	07/03/02	4943.73	12.57	4931.16	8.63	NA	NA	3.94	4935.10
	04/01/02	4943.73	12.57	4931.16	8.94	NA	NA	3.63	4934.79
	01/03/02	4943.73	12.57	4931.16	8.71	NA	NA	3.86	4935.02
	10/01/01	4943.73	12.65	4931.08	8.40	NA	NA	4.25	4935.33
	05/29/01	4943.73	12.57	4931.16	8.44	8.33	0.11	4.13	4935.38
	02/06/01	4943.73	12.57	4931.16	8.55	NA	NA	4.02	4935.18
	07/27/00	4943.73	12.57	4931.16	8.44	NA	NA	4.13	4935.29
	04/26/00	4943.73	NA	NA	8.53	NA	NA	NA	4935.20
	01/26/00	4943.73	NA	NA	8.93	NA	NA	NA	4934.80
	03/24/94	4943.73	NA	NA	8.96	NA	NA	NA	4934.77

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.

GROUND WATER ELEVATION DATA
 TABLE 1

MONITOR WELL NUMBER	DATE	CASING RIM ELEVATION (FEET)	DEPTH TO BOTTOM (FEET)	BOTTOM OF CASING ELEVATION (FEET)	DEPTH TO GROUND WATER (FEET)	DEPTH TO PRODUCT (FEET)	PRODUCT THICKNESS (FEET)	WATER COLUMN THICKNESS (FEET)	POTENTIOMETRIC SURFACE ELEVATION (FEET)
VP-3	05/30/03	Plugged and Abandoned							
	01/26/00	4943.73	13.16	4930.57	8.85	NA	NA	4.31	4934.88
	01/06/00	4943.73	13.16	4930.57	8.84	NA	NA	4.32	4934.89
	02/09/95	4943.73	13.16	4930.57	8.93	NA	NA	4.23	4934.80
VP-4	05/30/03	Plugged and Abandoned							
	01/26/00	4943.72	12.73	4930.99	8.54	NA	NA	4.19	4935.18
	01/06/00	4943.72	12.73	4930.99	8.53	NA	NA	4.20	4935.19
	03/07/96	4943.72	12.73	4930.99	8.46	NA	NA	4.27	4935.26
VP-5	07/17/03	4943.52	12.17	4931.35	8.55	NA	NA	3.62	4934.97
	01/10/03	4943.52	12.17	4931.35	8.53	NA	NA	3.64	4934.99
	09/24/02	4943.52	12.17	4931.35	8.44	NA	NA	3.73	4935.08
	07/03/02	4943.52	12.17	4931.35	8.27	NA	NA	3.90	4935.25
	04/01/02	4943.52	12.17	4931.35	8.56	NA	NA	3.61	4934.96
	01/03/02	4943.52	12.17	4931.35	8.55	NA	NA	3.62	4934.97
	10/02/01	4943.52	12.05	4931.47	8.10	NA	NA	3.95	4935.42
	05/29/01	4943.52	12.17	4931.35	8.01	NA	NA	4.16	4935.51
	07/27/00	4943.52	12.17	4931.35	8.18	NA	NA	3.99	4935.34
	04/26/00	4943.52	NA	NA	8.17	NA	NA	NM	4935.35
	01/26/00	4943.52	NA	NA	8.61	NA	NA	NM	4934.91
	03/07/96	4943.52	NA	NA	8.55	NA	NA	NM	4934.97



Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.

GROUND WATER ELEVATION DATA
 TABLE 1

MONITOR WELL NUMBER	DATE	CASING RIM ELEVATION (FEET)	DEPTH TO BOTTOM (FEET)	BOTTOM OF CASING ELEVATION (FEET)	DEPTH TO GROUND WATER (FEET)	DEPTH TO PRODUCT (FEET)	PRODUCT THICKNESS (FEET)	WATER COLUMN THICKNESS (FEET)	POTENTIOMETRIC SURFACE ELEVATION (FEET)
VP-6	05/30/03	Plugged and Abandoned							
	01/10/03	4943.53	12.55	4930.98	9.10	NA	NA	3.45	4934.43
	09/24/02	4943.53	12.55	4930.98	9.06	NA	NA	3.49	4934.47
	07/03/02	4943.53	12.55	4930.98	8.99	NA	NA	3.56	4934.54
	04/01/02	4943.53	12.55	4930.98	9.20	NA	NA	3.35	4934.33
	01/03/02	4943.53	12.55	4930.98	9.05	NA	NA	3.50	4934.48
	10/02/01	4943.53	12.33	4931.20	8.75	NA	NA	3.58	4934.78
	05/29/01	4943.53	12.60	4930.93	8.73	NA	NA	3.87	4934.80
	02/06/01	4943.53	12.60	4930.93	8.81	NA	NA	3.79	4934.72
	07/27/00	4943.53	12.60	4930.93	8.81	NA	NA	3.79	4934.72
	04/26/00	4943.53	12.60	4930.93	8.80	NA	NA	3.80	4934.73
	01/26/00	4943.53	12.60	4930.93	9.23	NA	NA	3.37	4934.30
	01/06/00	4943.53	12.60	4930.93	9.23	NA	NA	3.37	4934.30
	03/07/96	4943.53	12.60	4930.93	9.20	NA	NA	3.40	4934.33
VP-7	05/30/03	Plugged and Abandoned							
	01/26/00	4943.52	12.82	4930.70	9.52	NA	NA	3.30	4934.00
	01/06/00	4943.52	12.82	4930.70	9.52	NA	NA	3.30	4934.00
	03/07/96	4943.52	12.82	4930.70	9.45	NA	NA	3.37	4934.07
PR-2	05/30/03	Plugged and Abandoned							
	01/06/00	4944.09	9.18	4934.91	Dry	NA	NA	Dry	Dry
PR-3	05/30/03	Plugged and Abandoned							
	01/06/00	4944.22	8.73	4935.49	Dry	NA	NA	Dry	Dry

NM = Not Measured

NA = Not Applicable

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF WATER SAMPLE ANALYTICAL TEST RESULTS

TABLE 3

NMWQCC Regulatory Limits		*NAPHTHALENE (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENE (PPB)	**TOTAL BTEX (PPB)	MTBE (PPB)	EDB (PPB)	EDC (PPB)
MONITOR WELL	DATE	30	10	750	750	620		100	0.1	10
MW-1	06/06/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
	03/07/95	N/A	<0.5	<1.0	<1.0	<1.0	<4.5	NA	NA	NA
MW-2	09/20/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
	09/08/94	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
MW-3	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	12/01/94	N/A	<0.5	<1.0	<1.0	<2.0	<4.0	NA	NA	NA
	06/02/94	N/A	11	<1.0	1.3	<2.0	12.3	NA	NA	NA
MW-4	07/17/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	0.010	<1.0
	01/10/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	09/24/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	07/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	04/01/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	10/01/01	<15.0	<1.0	<1.0	<1.0	<3.0	<6.0	<1.0	<1.0	<1.0
	05/29/01	<6.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	02/06/01	3.9	2.5	<1.0	<1.0	1.5	4.0	<1.0	<1.0	<1.0
	07/27/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	04/26/00	<2.0	2.9	<1.0	<1.0	<1.0	2.9	<1.0	<1.0	<1.0
	01/30/00	<2.0	5.4	<1.0	<1.0	2.6	8.0	<1.0	<1.0	<1.0
	06/06/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
	03/07/95	N/A	40	1.0	54	<2.0	95.0	NA	NA	NA

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF WATER SAMPLE ANALYTICAL TEST RESULTS

TABLE 3

		*NAPHTHALENE (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENE (PPB)	**TOTAL BTEX (PPB)	MTBE (PPB)	EDB (PPB)	EDC (PPB)
NMWQCC Regulatory Limits		30	10	750	750	620		100	0.1	10
MONITOR WELL	DATE									
MW-5	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	12/05/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
	09/20/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
MW-6	01/30/00	<2.0	<1.0	8.3	18	54	80.3	<1.0	<1.0	<1.0
	03/07/96	N/A	1.7	1.4	2.0	4.2	9.3	NA	NA	NA
	12/05/95	N/A	1.2	4.2	2.8	12.0	20.2	NA	NA	NA
	12/01/94	N/A	29	26	36	130	221	NA	NA	NA
MW-7	07/17/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	0.010	<1.0
	01/10/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	09/24/02	22.8	3.1	< 1.0	< 1.0	1.7	4.8	<1.0	<1.0	<1.0
	07/03/02	28.8	2.6	< 1.0	< 1.0	3.0	5.6	<1.0	<1.0	<1.0
	04/01/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	10/02/01	<15.0	<1.0	<1.0	<1.0	3.3	3.3	<1.0	<1.0	<1.0
	03/07/96	N/A	1.9	<1.0	<1.0	<2.0	1.9	NA	NA	NA
	12/05/95	N/A	6.0	1.2	2.2	<2.0	9.4	NA	NA	NA
	09/20/95	N/A	78	2.1	9.9	8.7	98.7	NA	NA	NA



Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF WATER SAMPLE ANALYTICAL TEST RESULTS

TABLE 3

		*NAPHTHALENE (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENE (PPB)	**TOTAL BTEX (PPB)	MTBE (PPB)	EDB (PPB)	EDC (PPB)
NMWQCC Regulatory Limits		30	10	750	750	620		100	0.1	10
MONITOR WELL	DATE									
MW-8	07/17/03	310	<5.0	<5.0	66	38	104	<5.0	0.010	<5.0
	01/10/03	284	<2.0	<2.0	57	38	95	<2.0	<2.0	<2.0
	09/24/02	238	<5.0	<5.0	58	29	87	<5.0	<5.0	<5.0
	07/03/02	202	<5.0	<5.0	86	40	126	<5.0	<5.0	<5.0
	04/01/02	273	<5.0	<5.0	100	43	143	<5.0	<5.0	<5.0
	01/04/02	313	3.0	3.2	35	50	91.2	<2.0	<2.0	<2.0
	10/02/01	120	<10	<10	90	51	141	<10	<10	<10
	05/29/01	261	4.2	2.6	110	57	173.8	<2.0	<2.0	<2.0
	02/06/01	140	<10	<10	130	43	173.0	<10	<10	<10
	07/27/00	140	6.0	5.2	150	61	222.2	<1.0	<1.0	<1.0
	04/26/00	136	3.2	2.2	<1.0	35.0	40.4	<1.0	<1.0	<1.0
	01/30/00	98	<10	<10	150.0	5.7	155.7	<10	<10	<10
	03/07/96	N/A	71	24	400	150	645.0	NA	NA	NA
	12/05/95	N/A	8.6	8.3	49	18	83.9	NA	NA	NA
09/20/95	N/A	11	19	190	74	294.0	NA	NA	NA	
MW-9	07/17/03	<10.0	98	9.9	2.4	10	120.3	7.1	0.010	<1.0
	01/10/03	<10.0	2.2	<1.0	<1.0	<1.0	2.2	2.2	<1.0	<1.0
	09/24/02	13	9.2	<1.0	25	20	54.2	1.7	<1.0	<1.0
	07/03/02	28.8	5.1	1.9	16	18	41.0	<1.0	<1.0	<1.0
	01/30/00	2.7	9.4	6.9	59	51	126.3	<1.0	<1.0	<1.0
	03/07/96	N/A	<0.5	<1.0	<1.0	3.7	3.7	NA	NA	NA
	12/05/95	N/A	<0.5	<1.0	<1.0	14.0	14.0	NA	NA	NA
	09/20/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF WATER SAMPLE ANALYTICAL TEST RESULTS

TABLE 3

NIMWQCC Regulatory Limits		*NAPHTHALENE (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENE (PPB)	**TOTAL BTEX (PPB)	MTBE (PPB)	EDB (PPB)	EDC (PPB)
		30	10	750	750	620		100	0.1	10
MONITOR WELL	DATE									
VP-1	04/01/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	10/01/01	<15.0	<1.0	<1.0	<1.0	<3.0	<6.0	<1.0	<1.0	<1.0
	05/29/01	<6.0	1.9	<1.0	<1.0	2.0	3.9	<1.0	<1.0	<1.0
	02/06/01	<2.0	1.8	<1.0	<1.0	1.6	3.4	<1.0	<1.0	<1.0
	07/27/00	<2.0	3.5	<1.0	<1.0	1.4	4.9	<1.0	<1.0	<1.0
	04/26/00	<2.0	3.4	<1.0	<1.0	2.4	5.8	<1.0	<1.0	<1.0
	01/30/00	<2.0	1.3	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0
	03/07/96	N/A	<0.5	1.4	<1.0	<2.0	1.4	NA	NA	NA
	12/05/95	N/A	<0.5	1.2	1.0	<2.0	2.2	NA	NA	NA
	09/20/95	N/A	<0.5	<1.0	4.3	<2.0	4.3	NA	NA	NA
VP-2	07/17/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	0.010	<1.0
	01/10/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	09/24/02	3.4	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	07/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	04/01/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	10/01/01	<15.0	<1.0	<1.0	<1.0	<3.0	<6.0	<1.0	<1.0	<1.0
	05/29/01	36.7	<1.0	<1.0	1.2	4.9	6.1	<1.0	<1.0	<1.0
	02/06/01	13	<1.0	<1.0	<1.0	2.0	2.0	<1.0	<1.0	<1.0
	07/27/00	11	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	04/26/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	03/24/94	N/A	32	20	94	150	296	NA	NA	NA

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF WATER SAMPLE ANALYTICAL TEST RESULTS

TABLE 3

		*NAPHTHALENE (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENE (PPB)	**TOTAL BTEX (PPB)	MTBE (PPB)	EDB (PPB)	EDC (PPB)
NMWQCC Regulatory Limits		30	10	750	750	620		100	0.1	10
MONITOR WELL	DATE									
VP-3	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	06/16/93	N/A	110	7.3	180	74	371.3	NA	NA	NA
VP-4	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	03/07/96	N/A	1.7	<1.0	<1.0	<1.0	1.7	NA	NA	NA
	09/20/95	N/A	<0.5	<1.0	4.3	<2.0	4.3	NA	NA	NA
VP-5	07/17/03	930	< 5.0	< 5.0	110	54	164	<5.0	0.010	<5.0
	01/10/03	510	< 5.0	< 5.0	61	27	88	<5.0	<5.0	<5.0
	09/24/02	510	< 5.0	< 5.0	34	18	52	<5.0	<5.0	<5.0
	07/03/02	350	< 5.0	< 5.0	32	19	51	<5.0	<5.0	<5.0
	04/01/02	640	<1.0	<1.0	100	44	144	<1.0	<1.0	<1.0
	01/03/02	340	<5.0	<5.0	50	31	81	<5.0	<5.0	<5.0
	10/02/01	320	<5.0	<5.0	44	35	79	<5.0	<5.0	<5.0
	05/29/01	330	<1.0	1.2	21	17	39.2	<1.0	<1.0	<1.0
	07/27/00	89	<1.0	1.8	20	12	33.8	<1.0	<1.0	<1.0
	04/26/00	142	<1.0	1.4	14	7.1	22.5	<1.0	<1.0	<1.0
	01/30/00	80	<5.0	<5.0	20	10	30.0	<5.0	<5.0	<5.0
	03/07/96	N/A	9.5	<1.0	99	81	189.5	NA	NA	NA
	12/05/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA



Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 PSTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF WATER SAMPLE ANALYTICAL TEST RESULTS

TABLE 3

		*NAPHTHALENE (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENE (PPB)	**TOTAL BTEX (PPB)	MTBE (PPB)	EDB (PPB)	EDC (PPB)
NMWQCC Regulatory Limits		30	10	750	750	620		100	0.1	10
MONITOR WELL	DATE									
VP-6	01/10/03	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	09/24/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	07/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	04/01/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/03/02	<10.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	10/02/01	<15.0	<1.0	<1.0	<1.0	<3.0	<6.0	<1.0	<1.0	<1.0
	05/29/01	<6.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	02/06/01	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	07/27/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	04/26/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	03/07/95	N/A	0.8	<1.0	<1.0	2.1	2.9	NA	NA	NA
09/07/94	N/A	0.8	1.3	<1.0	<2.0	2.1	NA	NA	NA	
VP-7	01/30/00	<2.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
	12/05/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA
	06/06/95	N/A	<0.5	<1.0	<1.0	<2.0	<4.5	NA	NA	NA

**Total BTEX = total benzene, toluene, ethylbenzene, and xylenes

NMWQCC = New Mexico Water Quality Control Commission

MTBE = Methyl-tert-butyl ether

EDB = 1,2-Dibromomethane

EDC = 1,2-Dichloroethane

* Naphthalene = naphthalene only by EPA Method 8310 for 01/30/00 and 04/26/00

* Naphthalene = naphthalene, 1-methylnaphthalene, 2-methylnaphthalene by EPA Method 8260 Extended beginning 07/27/00

PPB = parts per billion

N/A = Not Available

N/S = Not sampled due to presence of sheen.

<0.010* = EDB by EPA Method 504.1

Barelas Bridge
 800 Bridge Blvd, SW
 Albuquerque, New Mexico
 USTB Facility #4608001 / 29854

WESTERN TECHNOLOGIES INC.
 SUMMARY OF DISSOLVED METALS EPA METHOD 6010
 ANALYTICAL TEST RESULTS
 TABLE 6

MONITOR WELL	DATE	LEAD (Mg/L)	IRON (Mg/L)	MANGANESE (Mg/L)
NMWQCC Regulatory Limits		0.050*	1.0**	0.2**
MW-4	05/29/01	<0.005	0.17	1.97
	02/06/01	<0.005	1.19	1.76
MW-8	05/29/01	<0.005	1.12	0.39
	02/06/01	<0.005	0.68	0.38
VP-1	05/29/01	<0.005	1.72	1.67
	02/06/01	<0.005	2.07	1.07
VP-2	05/29/01	<0.005	0.83	1.21
	02/06/01	<0.005	0.70	0.92
VP-5	05/29/01	<0.005	3.42	0.53
VP-6	05/29/01	<0.005	0.67	0.62
	02/06/01	<0.005	0.52	0.45

NMWQCC = New Mexico Water Quality Control Commission

* = NMWQCC Regulations 20.6.2.3103.A. Human Health Standards

** = NMWQCC Regulations 20.6.2.3103.B. Other Standards for Domestic Water Supply



**NEW MEXICO ENVIRONMENT DEPARTMENT
BARELAS BRIDGE SITE
ALBUQUERQUE, NEW MEXICO
APRIL 2014**

**Table 1
Summary of Groundwater Elevation Data
(All data reported in feet)**

Well No.	Monitoring Date	Top of Casing Elevation	Depth to Bottom	Depth to Water	Groundwater Elevation
MW-4	10/4/2006	4943.23	7.5	8.02	4935.21
	5/8/2009			7.67	4935.56
	8/13/2011			NM	NM
	4/2/2013			7.91	4935.32
	1/30/2014			8.20	4935.03
	4/9/2014			8.16	4935.07
MW-7	10/4/2006	4942.94	21.3	8.20	4934.74
	5/8/2009			7.81	4935.13
	8/13/2011			7.91	4935.03
	4/2/2013			7.99	4934.95
MW-8	10/4/2006	4944.59	12.8	9.30	4935.29
	5/8/2009			8.96	4935.63
	8/13/2011			9.12	4935.47
	4/2/2013			9.23	4935.36
	1/30/2014			9.50	4935.09
	4/9/2014			9.47	4935.12
MW-9	10/4/2006	4943.98	19.2	8.83	4935.15
	5/8/2009			8.48	4935.50
	8/13/2011			8.63	4935.35
	4/2/2013			8.71	4935.27
	1/30/2014			8.98	4935.00
	4/9/2014			8.94	4935.04
VP-2	10/4/2006	4943.73	12.5	8.43	4935.30
	5/8/2009			8.07	4935.66
	8/13/2011			7.23	4936.50
	4/2/2013			8.33	4935.40
	1/30/2014			8.61	4935.12
	4/9/2014			8.57	4935.16
VP-5	10/4/2006	4943.52	11.9	8.10	4935.42
	5/8/2009			7.78	4935.74
	8/13/2011			7.97	4935.55
	4/2/2013			8.06	4935.46
	1/30/2014			8.30	4935.22
	4/9/2014			8.25	4935.27

2006-2009 Data provided by the NMED
NM = Not measured (tree roots obstructing inner well)

**NEW MEXICO ENVIRONMENT DEPARTMENT
BARELAS BRIDGE SITE
ALBUQUERQUE, NEW MEXICO
APRIL 2014**

**Table 2
Summary of Groundwater Chemistry Data
(Concentrations in micrograms per liter [µg/l or ppb])**

Well No.	Sample Date	Benzene	Toulene	Ethylbenzene	Total Xylenes	MTBE	NAPH
MW-4	10/4/2006	<1.0	<1.0	<1.0	<3.0	<1.5	<10
	5/8/2009	<1.0	<1.0	<1.0	<1.5	<1.0	<10
	8/13/2011	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	4/2/2013	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	1/30/2014	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	4/9/2014	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
MW-7	10/4/2006	<1.0	<1.0	<1.0	<3.0	<1.5	<10
	5/8/2009	<1.0	<1.0	<1.0	<1.5	<1.0	<10
	8/13/2011	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
MW-8	10/4/2006	<2.0	<2.0	34	18	<3.0	210
	5/8/2009	<1.0	<1.0	24	8.0	<1.0	92
	8/13/2011	<10	<10	32	<15	<10	72
	4/2/2013	<5.0	<5.0	31	10	<5.0	149
	1/30/2014	1.3	1.4	33	8.2	<1.0	134
	4/9/2014	<1.0	1.2	32	7.3	<1.0	113
MW-9	10/4/2006	62	44	11	42	<1.5	6.9
	5/8/2009	12	7.1	45	68	<1.0	77
	8/13/2011	750	150	270	880	12	93
	4/2/2013	320	34	<10	150	<10	<40
	1/30/2014	190	59	200	340	<2.0	67
	4/9/2014	100	49	72	110	<1.0	32.4
VP-2	10/4/2006	<1.0	<1.0	<1.0	<3.0	<1.5	<10
	5/8/2009	<1.0	<1.0	1.3	1.6	<1.0	37.3
	8/13/2011	<1.0	<1.0	2.1	2.4	<1.0	78
	4/2/2013	<2.0	<2.0	<2.0	<3.0	<2.0	34.7
	1/30/2014	<1.0	<1.0	<1.0	<1.5	<1.0	2.2
	4/9/2014	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0

**NEW MEXICO ENVIRONMENT DEPARTMENT
BARELAS BRIDGE SITE
ALBUQUERQUE, NEW MEXICO
APRIL 2014**

**Table 2
Summary of Groundwater Chemistry Data
(Concentrations in micrograms per liter [µg/l or ppb])**

Well No.	Sample Date	Benzene	Toulene	Ethylbenzene	Total Xylenes	MTBE	NAPH
VP-5	10/4/2006	<10	<10	21	<30	<15	430
	5/8/2009	<5.0	<5.0	7.1	<7.5	<5.0	386
	8/13/2011	1.4	1.8	12	2.4	<1.0	469
	4/2/2013	<2.0	<2.0	7.7	<3.0	<2.0	270
	1/30/2014	<1.0	1.0	3.0	<1.5	<1.0	187
	4/9/2014	<1.0	1.2	4.5	<1.5	<1.0	217
NMWQCC/NMEIB Standard		10	750	750	620	100	30

2006-2009 Data provided by the NMED

NMWQCC: New Mexico Water Quality Control Commission

NMEIB: New Mexico Environmental Improvement Board

MTBE: Methyl t-butyl ether

NAPH: Total Naphthalenes

Analysis by EPA Test Method 8260.

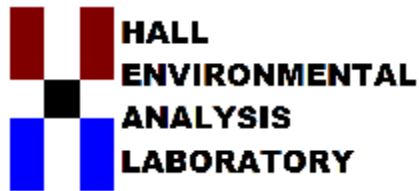
Shaded cells represent concentrations exceeding applicable standard for most recent event.

**SUMMARY OF WELL COMPLETION INFORMATION
BARELAS BRIDGE GWPA SITE
800 BRIDGE BLVD., S.W.
ALBUQUERQUE, NEW MEXICO**

WELL ID	DATE INSTALLED	MP OR TOC ELEV. (FTAMSL)	TOTAL DEPTH OF WELL (FT)	WELL DIAMETER/ CONSTRUCTION	SCREENED INTERVAL/ SLOT SIZE	SCREEN LENGTH (FT)	STATUS/ COMMENTS
MW-1	02/07/90	4942.94	17	2" PVC	2'-17'/0.020"	15	
MW-2	02/07/90	4942.36	23	2" PVC	3'-18'/0.020"	15	
MW-3	02/07/90	4941.97	22.5	2" PVC	2.5'- 17.5'/0.020"	15	
MW-4	02/08/90	4943.86	23.5	2" PVC	3.5'- 18.5'/0.020"	15	
MW-5	10/16/90	4942.09	21.5	2" PVC	7'-22'/0.010"	15	
MW-6	10/16/90	4943.18	22	2" PVC	7'-22'/0.010"	15	
MW-7	10/18/90	4942.94	22	2" PVC	7'-22'/0.010"	15	
MW-8	10/18/90	4944.57	13	2" STEEL	8'-13'/0.010"	5	
MW-9	08/20/92	--	20.0	2" PVC	5'-20'/0.020"	15	
VP-1	08/19/92	--	14.5	4" PVC	9.5'- 14.5'/0.020" 4.5'- 9.5'/0.040"	10	Vapor extraction well
AS-1	08/19/92	--	22.2	2" PVC	20'- 22'/0.010"	2	Air sparge well
PR-2	08/18/92	--	9	2" PVC	3'-5'/0.020" 7'-9'/0.020"	2'/2'	Nested vadose monitor probe
PR-3	08/18/92	--	9.3	2" PVC	3'-5'/0.020" 7'-9'/0.020"	2'/2'	Nested vadose monitor probe

NMED/BB
bb.rap

APPENDIX D
Laboratory Analytical Report – Groundwater



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

January 22, 2018

Eileen Marcillo

Intera, Inc.

6000 Uptown Boulevard, NE Suite 220

Albuquerque, NM 87110

TEL: (505) 246-1600

FAX (505) 246-2600

RE: Barelas Bridge

OrderNo.: 1801726

Dear Eileen Marcillo:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/12/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-7

Project: Barelás Bridge

Collection Date: 1/12/2018 10:30:00 AM

Lab ID: 1801726-001

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Toluene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Ethylbenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Naphthalene	ND	2.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
2-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Acetone	ND	10		µg/L	1	1/19/2018 4:44:00 PM	R48558
Bromobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Bromodichloromethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Bromoform	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Bromomethane	ND	3.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
2-Butanone	ND	10		µg/L	1	1/19/2018 4:44:00 PM	R48558
Carbon disulfide	ND	10		µg/L	1	1/19/2018 4:44:00 PM	R48558
Carbon Tetrachloride	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Chlorobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Chloroethane	ND	2.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Chloroform	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Chloromethane	ND	3.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
2-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
4-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
cis-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Dibromochloromethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Dibromomethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,1-Dichloroethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,1-Dichloroethene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,3-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
2,2-Dichloropropane	ND	2.0		µg/L	1	1/19/2018 4:44:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-7

Project: Barelás Bridge

Collection Date: 1/12/2018 10:30:00 AM

Lab ID: 1801726-001

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Hexachlorobutadiene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
2-Hexanone	ND	10		µg/L	1	1/19/2018 4:44:00 PM	R48558
Isopropylbenzene	1.1	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
4-Isopropyltoluene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
4-Methyl-2-pentanone	ND	10		µg/L	1	1/19/2018 4:44:00 PM	R48558
Methylene Chloride	ND	3.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
n-Butylbenzene	ND	3.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
n-Propylbenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
sec-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Styrene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
tert-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
trans-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Trichlorofluoromethane	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Vinyl chloride	ND	1.0		µg/L	1	1/19/2018 4:44:00 PM	R48558
Xylenes, Total	ND	1.5		µg/L	1	1/19/2018 4:44:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	83.3	70-130		%Rec	1	1/19/2018 4:44:00 PM	R48558
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	1/19/2018 4:44:00 PM	R48558
Surr: Dibromofluoromethane	83.0	70-130		%Rec	1	1/19/2018 4:44:00 PM	R48558
Surr: Toluene-d8	81.1	70-130		%Rec	1	1/19/2018 4:44:00 PM	R48558

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-4

Project: Barelás Bridge

Collection Date: 1/12/2018 11:05:00 AM

Lab ID: 1801726-002

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Toluene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Ethylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Naphthalene	ND	2.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
2-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Acetone	ND	10		µg/L	1	1/19/2018 5:56:00 PM	R48558
Bromobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Bromodichloromethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Bromoform	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Bromomethane	ND	3.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
2-Butanone	ND	10		µg/L	1	1/19/2018 5:56:00 PM	R48558
Carbon disulfide	ND	10		µg/L	1	1/19/2018 5:56:00 PM	R48558
Carbon Tetrachloride	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Chlorobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Chloroethane	ND	2.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Chloroform	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Chloromethane	ND	3.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
2-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
4-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
cis-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Dibromochloromethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Dibromomethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,1-Dichloroethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,1-Dichloroethene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,3-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
2,2-Dichloropropane	ND	2.0		µg/L	1	1/19/2018 5:56:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-4

Project: Barelás Bridge

Collection Date: 1/12/2018 11:05:00 AM

Lab ID: 1801726-002

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Hexachlorobutadiene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
2-Hexanone	ND	10		µg/L	1	1/19/2018 5:56:00 PM	R48558
Isopropylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
4-Isopropyltoluene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
4-Methyl-2-pentanone	ND	10		µg/L	1	1/19/2018 5:56:00 PM	R48558
Methylene Chloride	ND	3.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
n-Butylbenzene	ND	3.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
n-Propylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
sec-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Styrene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
tert-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
trans-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Trichlorofluoromethane	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Vinyl chloride	ND	1.0		µg/L	1	1/19/2018 5:56:00 PM	R48558
Xylenes, Total	ND	1.5		µg/L	1	1/19/2018 5:56:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	83.7	70-130		%Rec	1	1/19/2018 5:56:00 PM	R48558
Surr: 4-Bromofluorobenzene	80.7	70-130		%Rec	1	1/19/2018 5:56:00 PM	R48558
Surr: Dibromofluoromethane	85.4	70-130		%Rec	1	1/19/2018 5:56:00 PM	R48558
Surr: Toluene-d8	79.5	70-130		%Rec	1	1/19/2018 5:56:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: VP-2

Project: Barelás Bridge

Collection Date: 1/12/2018 11:45:00 AM

Lab ID: 1801726-003

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Toluene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Ethylbenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Naphthalene	11	2.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
2-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Acetone	ND	10		µg/L	1	1/19/2018 6:20:00 PM	R48558
Bromobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Bromodichloromethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Bromoform	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Bromomethane	ND	3.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
2-Butanone	ND	10		µg/L	1	1/19/2018 6:20:00 PM	R48558
Carbon disulfide	ND	10		µg/L	1	1/19/2018 6:20:00 PM	R48558
Carbon Tetrachloride	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Chlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Chloroethane	ND	2.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Chloroform	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Chloromethane	ND	3.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
2-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
4-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
cis-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Dibromochloromethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Dibromomethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,1-Dichloroethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,1-Dichloroethene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,3-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
2,2-Dichloropropane	ND	2.0		µg/L	1	1/19/2018 6:20:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: VP-2

Project: Barelás Bridge

Collection Date: 1/12/2018 11:45:00 AM

Lab ID: 1801726-003

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Hexachlorobutadiene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
2-Hexanone	ND	10		µg/L	1	1/19/2018 6:20:00 PM	R48558
Isopropylbenzene	4.6	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
4-Isopropyltoluene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
4-Methyl-2-pentanone	ND	10		µg/L	1	1/19/2018 6:20:00 PM	R48558
Methylene Chloride	ND	3.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
n-Butylbenzene	ND	3.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
n-Propylbenzene	7.3	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
sec-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Styrene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
tert-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
trans-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Trichlorofluoromethane	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Vinyl chloride	ND	1.0		µg/L	1	1/19/2018 6:20:00 PM	R48558
Xylenes, Total	ND	1.5		µg/L	1	1/19/2018 6:20:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	82.0	70-130		%Rec	1	1/19/2018 6:20:00 PM	R48558
Surr: 4-Bromofluorobenzene	85.6	70-130		%Rec	1	1/19/2018 6:20:00 PM	R48558
Surr: Dibromofluoromethane	84.8	70-130		%Rec	1	1/19/2018 6:20:00 PM	R48558
Surr: Toluene-d8	81.3	70-130		%Rec	1	1/19/2018 6:20:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-8

Project: Barelás Bridge

Collection Date: 1/12/2018 12:20:00 PM

Lab ID: 1801726-004

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Toluene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Ethylbenzene	7.9	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Naphthalene	25	2.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1-Methylnaphthalene	13	4.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
2-Methylnaphthalene	18	4.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Acetone	ND	10		µg/L	1	1/19/2018 6:44:00 PM	R48558
Bromobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Bromodichloromethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Bromoform	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Bromomethane	ND	3.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
2-Butanone	ND	10		µg/L	1	1/19/2018 6:44:00 PM	R48558
Carbon disulfide	ND	10		µg/L	1	1/19/2018 6:44:00 PM	R48558
Carbon Tetrachloride	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Chlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Chloroethane	ND	2.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Chloroform	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Chloromethane	ND	3.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
2-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
4-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
cis-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Dibromochloromethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Dibromomethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,1-Dichloroethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,1-Dichloroethene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,3-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
2,2-Dichloropropane	ND	2.0		µg/L	1	1/19/2018 6:44:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-8

Project: Barelás Bridge

Collection Date: 1/12/2018 12:20:00 PM

Lab ID: 1801726-004

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Hexachlorobutadiene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
2-Hexanone	ND	10		µg/L	1	1/19/2018 6:44:00 PM	R48558
Isopropylbenzene	8.8	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
4-Isopropyltoluene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
4-Methyl-2-pentanone	ND	10		µg/L	1	1/19/2018 6:44:00 PM	R48558
Methylene Chloride	ND	3.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
n-Butylbenzene	ND	3.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
n-Propylbenzene	18	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
sec-Butylbenzene	2.2	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Styrene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
tert-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
trans-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Trichlorofluoromethane	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Vinyl chloride	ND	1.0		µg/L	1	1/19/2018 6:44:00 PM	R48558
Xylenes, Total	2.4	1.5		µg/L	1	1/19/2018 6:44:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	81.9	70-130		%Rec	1	1/19/2018 6:44:00 PM	R48558
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	1/19/2018 6:44:00 PM	R48558
Surr: Dibromofluoromethane	82.6	70-130		%Rec	1	1/19/2018 6:44:00 PM	R48558
Surr: Toluene-d8	77.2	70-130		%Rec	1	1/19/2018 6:44:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: VP-5

Project: Barelás Bridge

Collection Date: 1/12/2018 2:15:00 PM

Lab ID: 1801726-005

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Toluene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Ethylbenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Naphthalene	ND	4.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1-Methylnaphthalene	40	8.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
2-Methylnaphthalene	55	8.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Acetone	ND	20		µg/L	2	1/19/2018 7:08:00 PM	R48558
Bromobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Bromodichloromethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Bromoform	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Bromomethane	ND	6.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
2-Butanone	ND	20		µg/L	2	1/19/2018 7:08:00 PM	R48558
Carbon disulfide	ND	20		µg/L	2	1/19/2018 7:08:00 PM	R48558
Carbon Tetrachloride	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Chlorobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Chloroethane	ND	4.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Chloroform	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Chloromethane	ND	6.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
2-Chlorotoluene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
4-Chlorotoluene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
cis-1,2-DCE	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Dibromochloromethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Dibromomethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2-Dichlorobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,3-Dichlorobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,4-Dichlorobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Dichlorodifluoromethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,1-Dichloroethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,1-Dichloroethene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2-Dichloropropane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,3-Dichloropropane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
2,2-Dichloropropane	ND	4.0		µg/L	2	1/19/2018 7:08:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: VP-5

Project: Barelás Bridge

Collection Date: 1/12/2018 2:15:00 PM

Lab ID: 1801726-005

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Hexachlorobutadiene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
2-Hexanone	ND	20		µg/L	2	1/19/2018 7:08:00 PM	R48558
Isopropylbenzene	13	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
4-Isopropyltoluene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
4-Methyl-2-pentanone	ND	20		µg/L	2	1/19/2018 7:08:00 PM	R48558
Methylene Chloride	ND	6.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
n-Butylbenzene	6.5	6.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
n-Propylbenzene	43	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
sec-Butylbenzene	3.5	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Styrene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
tert-Butylbenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
trans-1,2-DCE	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,1,1-Trichloroethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,1,2-Trichloroethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Trichloroethene (TCE)	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Trichlorofluoromethane	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
1,2,3-Trichloropropane	ND	4.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Vinyl chloride	ND	2.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Xylenes, Total	ND	3.0		µg/L	2	1/19/2018 7:08:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	83.0	70-130		%Rec	2	1/19/2018 7:08:00 PM	R48558
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	2	1/19/2018 7:08:00 PM	R48558
Surr: Dibromofluoromethane	82.2	70-130		%Rec	2	1/19/2018 7:08:00 PM	R48558
Surr: Toluene-d8	77.1	70-130		%Rec	2	1/19/2018 7:08:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-9

Project: Barelás Bridge

Collection Date: 1/12/2018 3:45:00 PM

Lab ID: 1801726-006

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	4.0	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Toluene	1.4	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Ethylbenzene	11	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2,4-Trimethylbenzene	1.2	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Naphthalene	44	2.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1-Methylnaphthalene	10	4.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
2-Methylnaphthalene	14	4.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Acetone	ND	10		µg/L	1	1/19/2018 7:31:00 PM	R48558
Bromobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Bromodichloromethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Bromoform	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Bromomethane	ND	3.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
2-Butanone	ND	10		µg/L	1	1/19/2018 7:31:00 PM	R48558
Carbon disulfide	ND	10		µg/L	1	1/19/2018 7:31:00 PM	R48558
Carbon Tetrachloride	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Chlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Chloroethane	ND	2.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Chloroform	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Chloromethane	ND	3.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
2-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
4-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
cis-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Dibromochloromethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Dibromomethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,1-Dichloroethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,1-Dichloroethene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,3-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
2,2-Dichloropropane	ND	2.0		µg/L	1	1/19/2018 7:31:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: MW-9

Project: Barelás Bridge

Collection Date: 1/12/2018 3:45:00 PM

Lab ID: 1801726-006

Matrix: AQUEOUS

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Hexachlorobutadiene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
2-Hexanone	ND	10		µg/L	1	1/19/2018 7:31:00 PM	R48558
Isopropylbenzene	4.4	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
4-Isopropyltoluene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
4-Methyl-2-pentanone	ND	10		µg/L	1	1/19/2018 7:31:00 PM	R48558
Methylene Chloride	ND	3.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
n-Butylbenzene	ND	3.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
n-Propylbenzene	12	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
sec-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Styrene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
tert-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
trans-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Trichlorofluoromethane	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Vinyl chloride	ND	1.0		µg/L	1	1/19/2018 7:31:00 PM	R48558
Xylenes, Total	11	1.5		µg/L	1	1/19/2018 7:31:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	82.2	70-130		%Rec	1	1/19/2018 7:31:00 PM	R48558
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	1/19/2018 7:31:00 PM	R48558
Surr: Dibromofluoromethane	83.9	70-130		%Rec	1	1/19/2018 7:31:00 PM	R48558
Surr: Toluene-d8	81.2	70-130		%Rec	1	1/19/2018 7:31:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: TRIP BLANK

Project: Barelás Bridge

Collection Date:

Lab ID: 1801726-007

Matrix: TRIP BLANK

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Toluene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Ethylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Naphthalene	ND	2.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
2-Methylnaphthalene	ND	4.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Acetone	ND	10		µg/L	1	1/19/2018 7:55:00 PM	R48558
Bromobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Bromodichloromethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Bromoform	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Bromomethane	ND	3.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
2-Butanone	ND	10		µg/L	1	1/19/2018 7:55:00 PM	R48558
Carbon disulfide	ND	10		µg/L	1	1/19/2018 7:55:00 PM	R48558
Carbon Tetrachloride	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Chlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Chloroethane	ND	2.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Chloroform	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Chloromethane	ND	3.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
2-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
4-Chlorotoluene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
cis-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Dibromochloromethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Dibromomethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,1-Dichloroethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,1-Dichloroethene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,3-Dichloropropane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
2,2-Dichloropropane	ND	2.0		µg/L	1	1/19/2018 7:55:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1801726

Date Reported: 1/22/2018

CLIENT: Intera, Inc.

Client Sample ID: TRIP BLANK

Project: Barelás Bridge

Collection Date:

Lab ID: 1801726-007

Matrix: TRIP BLANK

Received Date: 1/12/2018 4:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Hexachlorobutadiene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
2-Hexanone	ND	10		µg/L	1	1/19/2018 7:55:00 PM	R48558
Isopropylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
4-Isopropyltoluene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
4-Methyl-2-pentanone	ND	10		µg/L	1	1/19/2018 7:55:00 PM	R48558
Methylene Chloride	ND	3.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
n-Butylbenzene	ND	3.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
n-Propylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
sec-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Styrene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
tert-Butylbenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
trans-1,2-DCE	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Trichlorofluoromethane	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Vinyl chloride	ND	1.0		µg/L	1	1/19/2018 7:55:00 PM	R48558
Xylenes, Total	ND	1.5		µg/L	1	1/19/2018 7:55:00 PM	R48558
Surr: 1,2-Dichloroethane-d4	84.2	70-130		%Rec	1	1/19/2018 7:55:00 PM	R48558
Surr: 4-Bromofluorobenzene	81.9	70-130		%Rec	1	1/19/2018 7:55:00 PM	R48558
Surr: Dibromofluoromethane	84.2	70-130		%Rec	1	1/19/2018 7:55:00 PM	R48558
Surr: Toluene-d8	81.0	70-130		%Rec	1	1/19/2018 7:55:00 PM	R48558

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1801726

22-Jan-18

Client: Intera, Inc.
Project: Barelas Bridge

Sample ID 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/19/2018		SeqNo: 1562485		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.0	70	130			
Surr: 4-Bromofluorobenzene	8.3		10.00		83.0	70	130			
Surr: Dibromofluoromethane	8.6		10.00		85.6	70	130			
Surr: Toluene-d8	8.0		10.00		80.2	70	130			

Sample ID rb	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/19/2018		SeqNo: 1562486		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1801726

22-Jan-18

Client: Intera, Inc.
Project: Barelas Bridge

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R48558	RunNo:	48558					
Prep Date:		Analysis Date:	1/19/2018	SeqNo:	1562486	Units:	µg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1801726

22-Jan-18

Client: Intera, Inc.
Project: Barelas Bridge

Sample ID rb	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/19/2018		SeqNo: 1562486		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		84.5	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		80.1	70	130			
Surr: Dibromofluoromethane	8.4		10.00		84.1	70	130			
Surr: Toluene-d8	8.0		10.00		80.1	70	130			

Sample ID 1801726-001ams	SampType: MS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: MW-7	Batch ID: R48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/19/2018		SeqNo: 1562497		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.09600	105	70	130			
Toluene	20	1.0	20.00	0	99.6	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	8.4		10.00		84.0	70	130			
Surr: 4-Bromofluorobenzene	8.5		10.00		84.9	70	130			
Surr: Dibromofluoromethane	8.4		10.00		84.4	70	130			
Surr: Toluene-d8	8.0		10.00		79.8	70	130			

Sample ID 1801726-001amsd	SampType: MSD		TestCode: EPA Method 8260B: VOLATILES							
Client ID: MW-7	Batch ID: R48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/19/2018		SeqNo: 1562498		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.09600	103	70	130	1.43	20	
Toluene	20	1.0	20.00	0	98.2	70	130	1.40	20	
Chlorobenzene	20	1.0	20.00	0	99.4	70	130	2.29	20	
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130	3.55	20	
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130	1.80	20	
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.6		10.00		85.5	70	130	0	0	
Surr: Dibromofluoromethane	8.5		10.00		85.1	70	130	0	0	
Surr: Toluene-d8	8.1		10.00		80.9	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1801726

22-Jan-18

Client: Intera, Inc.
Project: Barelax Bridge

Sample ID 100ng lcs2	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: B48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/20/2018		SeqNo: 1562519		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.6	70	130			
Surr: 4-Bromofluorobenzene	8.2		10.00		82.2	70	130			
Surr: Dibromofluoromethane	8.5		10.00		85.1	70	130			
Surr: Toluene-d8	7.9		10.00		78.7	70	130			

Sample ID rb2	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: B48558		RunNo: 48558							
Prep Date:	Analysis Date: 1/20/2018		SeqNo: 1562524		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.6	70	130			
Surr: 4-Bromofluorobenzene	8.1		10.00		81.5	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.5	70	130			
Surr: Toluene-d8	8.0		10.00		79.9	70	130			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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

Sample Log-In Check List

Client Name: INT

Work Order Number: 1801726

RcptNo: 1

Received By: Dennis Suazo 1/12/2018 4:25:00 PM

Completed By: Ashley Gallegos 1/14/2018 3:12:43 PM

Reviewed By: *SRe 01/15/18*

Dennis Suazo
Ashley Gallegos

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
 2. How was the sample delivered? Client

Log In

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

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____	Date: _____
By Whom: _____	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding: _____	
Client Instructions: _____	

16. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	7.3	Good	Not Present			

Chain-of-Custody Record

Client: **INTELA**

Mailing Address: **1435 S. St. Francis Dr. Suite 103, Santa Fe, NM**

Phone #: **505-428-0066**

email or Fax#: **Emanuello@Intela.com**

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

Accreditation
 NELAP Other _____

EDD (Type) _____

Turn-Around Time:

Standard Rush

Project Name:

Barabas Bridge

Project #:

Project Manager:

Eileen Mancillo

Sampler: **Mike Geber**

On Ice: Yes No

Sample Temperature: **8-3-10(A)=7.3**



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)	
1/12/18	1030	GW	MW-7	VOA-3	Hg Cl ₂	1801726 -001										X			
1/12/18	1065	GW	MW-4	VOA-3	Hg Cl ₂	-002										X			
1/12/18	1145	GW	VP-2	VOA-3	Hg Cl ₂	-003										X			
1/12/18	1220	GW	MW-8	VOA-3	Hg Cl ₂	-004										X			
1/12/18	1415	GW	VP-5	VOA-3	Hg Cl ₂	-005										X			
1/12/18	1545	GW	MW-9	VOA-3	Hg Cl ₂	-006										X			
-	-	-	Trip Blank	VOA-2	HCl	-007										X			

Date: 1/12/18 Time: 1625 Relinquished by: **Michael Schum**

Received by: **[Signature]** Date: 1/12/18 Time: 1625

Remarks:

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