

GW 0004

PENV000GW00004

CEMC

Former Eunice

North Gas Plant

Final Report

2020



Jason Michelson
Project Manager

Chevron Environmental
Management Company
1500 Louisiana Street, #38116
Houston, Texas 77002
Work: 832-854-5601
Cell: 281-660-8564
jmicelson@chevron.com

March 24, 2020

Mr. Bradford Billings
EMNRD/OCD
5200 Oakland , NE, Suite 100
Albuquerque, NM 87113

**Re: Former Eunice North Gas Plant
2019 Annual Groundwater Monitoring Report
Eunice, Lea County, New Mexico**

Dear Mr. Billings,

Please find enclosed the 2019 Annual Groundwater Monitoring Report, prepared for the Former Eunice North Gas Plant, in Eunice, New Mexico.

The Groundwater Monitoring Report was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Chevron Environmental Management Company (CEMC).

Please do not hesitate to call Rebecca Andresen with Arcadis at 206-726-4717 or myself at 832-854-5601, should you have any questions.

Sincerely,

Jason Michelson
Jason Michelson



Chevron Environmental Management Company

2019 ANNUAL GROUNDWATER MONITORING REPORT

Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

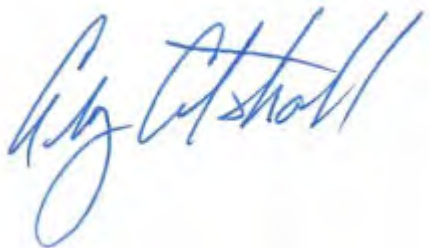
March 24, 2020



2019 ANNUAL GROUNDWATER MONITORING REPORT

2019 ANNUAL GROUNDWATER MONITORING REPORT

Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Greg Cutshall
Client Manager



Rebecca Andresen
Project Manager



Sonja Zabienski
Assistant Project Manager

Prepared for:
Chevron Environmental
Management Company

Prepared by:
Arcadis U.S., Inc.
630 Plaza Drive
Suite 200
Highlands Ranch
Colorado 80129
Tel 720 344 3500
Fax 720 344 3535

Our Ref.:
30006114

Date:
March 24, 2020

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

2019 ANNUAL GROUNDWATER MONITORING REPORT

This page intentionally left blank.

2019 ANNUAL GROUNDWATER MONITORING REPORT

CONTENTS

1	Introduction	1-1
2	Groundwater Monitoring Activities	2-1
2.1	Groundwater Sampling Methodology	2-1
2.2	Groundwater Gauging	2-1
2.3	Groundwater Analytical Results.....	2-2
2.3.1	Benzene, Toluene, Ethylbenzene, and Xylenes	2-2
2.3.2	Chloride and Total Dissolved Solids.....	2-3
2.3.3	Dissolved Metals	2-3
2.4	Chromium and Chloride Trend Analysis	2-4
2.4.1	Mann-Kendall Methodology.....	2-4
2.4.2	Dissolved Chromium Trend Analysis Results	2-4
2.4.3	Chloride Trend Analysis Results	2-5
3	Summary.....	3-1
4	References.....	4-1

TABLES

Table 1	Summary of 2019 Groundwater Monitoring
Table 2	2019 Groundwater Elevations
Table 3	Spring 2019 Field Parameters
Table 4	Fall 2019 Field Parameters
Table 5	Spring 2019 BTEX Analytical Data
Table 6	Fall 2019 BTEX Analytical Data
Table 7	Spring 2019 Metals, Chloride, and Total Dissolved Solids Analytical Data
Table 8	Fall 2019 Metals, Chloride, and Total Dissolved Solids Analytical Data

2019 ANNUAL GROUNDWATER MONITORING REPORT

FIGURES

Figure 1	Site Location Map
Figure 2	Well Location Map and Monitoring Plan
Figure 3	Potentiometric Surface Map – Spring 2019
Figure 4	Chloride Isoconcentration Map – Spring 2019
Figure 5	Chloride Isoconcentration Map – Fall 2019
Figure 6	Dissolved Chromium Isoconcentration Map – Spring 2019
Figure 7	Dissolved Chromium Isoconcentration Map – Fall 2019
Figure 8	Dissolved Hexavalent Chromium Isoconcentration Map – Spring 2019
Figure 9	Dissolved Hexavalent Chromium Isoconcentration Map – Fall 2019

APPENDICES

Appendix A	Site Background Information
Appendix B	Geologic Cross Sections
Appendix C	Historical Groundwater Elevations
Appendix D	Laboratory Analytical Reports and Data Validation Review
Appendix E	Historical Analytical Data (through 2017)
Appendix F	Historical Analytical Data (2017 to current)
Appendix G	Trend Analysis Summary

2019 ANNUAL GROUNDWATER MONITORING REPORT

ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
Arcadis	Arcadis U.S., Inc.
BTEX	benzene, toluene, ethylbenzene, and xylenes
CEMC	Chevron Environmental Management Company
CV	coefficient of variation
DRO	diesel-range organics
ft	foot
ft/ft	feet per foot
GRO	gasoline-range organics
HS	HydraSleeve™
J	estimated concentration qualifier
LNAPL	light nonaqueous phase liquid
mg/L	milligram per liter
NMWQCC	New Mexico Water Quality Control Commission
S	sum of trend
Site	former Eunice North Gas Plant, located in Eunice, Lea County, New Mexico
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency

2019 ANNUAL GROUNDWATER MONITORING REPORT

This page intentionally left blank.

2019 ANNUAL GROUNDWATER MONITORING REPORT

1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis) has prepared this 2019 Annual Groundwater Monitoring Report on behalf of Chevron Environmental Management Company (CEMC). This report summarizes semiannual groundwater monitoring activities conducted in 2019 at the former Eunice North Gas Plant (Site). Data presented in this report were collected during two semiannual groundwater monitoring events conducted during April and October 2019.

The Site is located approximately 0.5 mile north of Eunice, New Mexico in Lea County, in the southern half of the southeast quarter of the northeast quarter of Section 28, Township 21 South, Range 27 East. The approximately 30-acre Site is bordered by North Main Street to the east and residential areas to the south. The surrounding area is mostly flat, undeveloped grazing land with oil and gas production infrastructure. A Site location map is presented as Figure 1. A well location map and monitoring plan is presented as Figure 2 for more site details. Additional Site background information is included in Appendix A.

The Site and surrounding area are underlain by the Ogallala Formation, which is bounded by claystones, sandstones, and siltstones from the Triassic Chinle Formation. The base of the aquifer contains 5 to 10 feet of gravel, sand, and clay overlain by red and yellow sandstones. Geological cross sections are provided in Appendix B.

2019 ANNUAL GROUNDWATER MONITORING REPORT

This page intentionally left blank.

2019 ANNUAL GROUNDWATER MONITORING REPORT

2 GROUNDWATER MONITORING ACTIVITIES

Groundwater at the Site is monitored semiannually from a network of 80 wells (Arcadis 2017). Spring monitoring events include sampling and gauging 80 wells and fall events include a reduced set of 68 wells. Well locations and sampling frequency are shown on Figure 2 and Table 1 presents the summary of 2019 groundwater monitoring. Arcadis performed semiannual groundwater sampling events on April 9 through April 17, 2019 and October 7 through 11, 2019.

2.1 Groundwater Sampling Methodology

Representative groundwater samples were collected within the screened interval of each well under undisturbed conditions using the no-purge HydraSleeve™ (HS) method. After samples were collected, new HS samplers were deployed and remained in the wells until the next monitoring event.

Field parameters including temperature, pH, dissolved oxygen, oxidation-reduction potential, specific conductivity, and turbidity were recorded prior to sample collection using a downhole probe. Samples collected for dissolved metals and dissolved hexavalent chromium were filtered in the field using a 0.45-micron filter. April and October 2019 field parameter readings are summarized in Tables 3 and 4, respectively.

2.2 Groundwater Gauging

During both semiannual monitoring events, depth to groundwater and depth to light nonaqueous phase liquid (LNAPL), if present, were gauged in accessible wells using a water level meter or an oil-water interface probe, if LNAPL was anticipated, and measurements were recorded from the top of casing. A potentiometric surface map of the spring 2019 elevations is presented as Figure 3. During the spring event, two wells (MW016A and MW044) were not accessible for gauging. During the fall event, three wells (MW016A, MW053SA, and MW078SA) were not accessible for gauging. Data collected during the semiannual monitoring events indicate the following:

- Groundwater elevations ranged from 3,353.78 feet above mean sea level (ft amsl; MW086SA) to 3,384.60 ft amsl (MW061) during the April 2019 semiannual gauging event and
- 3,353.69 ft amsl (MW086SA) to 3,384.52 ft amsl (MW061) during the October 2019 semiannual gauging event.
- The groundwater elevations during the 2019 period appear to be consistent with historical levels, with groundwater flow to the northeast.
- Groundwater elevation data for the sampling events are presented in Table 2, with historical elevation data compiled in Appendix C. The annual groundwater potentiometric surface map for April 2019 is presented on Figure 3.
- The calculated average gradient is approximately 0.004 feet per foot (ft/ft) to the northeast; however, the gradient steepens from less than 0.001 ft/ft at the upgradient end of the plume to approximately 0.01 ft/ft at the downgradient end of the plume.

2019 ANNUAL GROUNDWATER MONITORING REPORT

- LNAPL was measured at MW006 during the spring and fall 2019 monitoring events at 0.10 foot and 0.14 foot, respectively. LNAPL has been intermittently measured at MW006 since 2012, with thicknesses ranging from 0.01 foot to 3.55 feet; however, has not been detected in any other site wells. MW006 is located within the site boundaries in the northeast, near the former location of a buried metal sump that was removed in 2003. Approximately 740 cubic yards of hydrocarbon-impacted soil were removed and the excavation was backfilled. According to the 2015 Annual Groundwater Monitoring Report (GHD 2016), LNAPL had been observed periodically in MW005 and MW006 since the excavation, and unspecified LNAPL remediation and recovery was performed from 2004 to 2011.

2.3 Groundwater Analytical Results

In 2019, analytical groundwater samples were collected from 74 wells during the spring monitoring event and from 63 wells during the fall monitoring event. Additionally, seven duplicate samples were collected during the spring monitoring event and eight duplicate samples were collected during the fall monitoring event for quality control purposes. During the events, six wells were not sampled that were included in the sampling plan (Table 1), for the following reasons:

- MW006, LNAPL present in well during spring and fall
- MW016A, locked gate
- MW044, well buried
- MW053SA, locked gate
- MW067SA, assumed obstruction in well causing insufficient water in HS for sample
- MW078SA, HS dry (spring), locked gate (fall)

Samples were sent to Xenco Laboratories in Midland, Texas for analysis of dissolved metals; total dissolved solids (TDS) and chloride; benzene, toluene, ethylbenzene, and xylenes (BTEX); diesel-range organics (DRO); and gasoline-range organics (GRO). Analytical results from 2019 were compared to the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards and summarized in Tables 5 through 8. Laboratory reports and data validation results are provided in Appendix D. Cumulative summary tables of groundwater analytical results from 1996 through 2017, and 2018 through present are presented in Appendices E and F, respectively.

2.3.1 Benzene, Toluene, Ethylbenzene, and Xylenes

Groundwater samples collected from six well locations during the spring and fall 2019 monitoring events were analyzed by United States Environmental Protection Agency (USEPA) Methods 8021B for BTEX and 8015B for DRO and GRO (Table 1). During these events, benzene was detected above the NMWQCC groundwater standard of 0.005 milligrams per liter (mg/L) in samples collected from one of the wells (MW037) with concentrations of 0.719 mg/L during the spring 2019 event and 0.0926 mg/L during the fall 2019 event. Analytical results for the samples collected for ethylbenzene, toluene, and xylenes were each below their respective standards. There are no NMWQCC Groundwater Standards established for DRO or GRO. Results are summarized in Tables 5 and 6.

2019 ANNUAL GROUNDWATER MONITORING REPORT

2.3.2 Chloride and Total Dissolved Solids

Groundwater samples were collected from 74 well locations in spring 2019 and 63 well locations in fall 2019, and analyzed by USEPA Methods 300/300.1 and 2540C for chloride and TDS, respectively (Table 1). Figures 4 and 5 present chloride isoconcentrations for the spring and fall 2019 monitoring events, respectively. Results are summarized as follows:

- *Chloride*. The NMWQCC standard of 250 mg/L was exceeded at 66 of 74 locations with a maximum concentration of 9,650 mg/L (MW069) in spring 2019. The NMWQCC standard was exceeded at 53 of 63 locations with a maximum concentration of 9,140 mg/L (MW069) in fall 2019.
- *TDS*. The NMWQCC standard of 1,000 mg/L was exceeded at 66 of 74 locations with a maximum concentration of 14,800 mg/L (MW069) in spring 2019. The NMWQCC standard was exceeded at 56 of 63 locations with a maximum concentration of 15,500 mg/L (MW068) in fall 2019.

Results for the Spring and Fall 2019 sampling events are summarized in Tables 7 and 8, respectively. Historical results are presented in Appendices E and F.

2.3.3 Dissolved Metals

Groundwater samples were collected from 74 well locations in spring 2019 and 63 well locations in fall 2019 and were analyzed by USEPA Method 6020A for dissolved arsenic, dissolved total chromium, dissolved iron, and dissolved manganese; and USEPA Method 7196A for dissolved hexavalent chromium (Table 1). Figures 6 through 9 present dissolved chromium and dissolved hexavalent chromium isoconcentrations for the spring and fall monitoring events. Results are summarized as follows:

- *Dissolved arsenic*. The NMWQCC standard of 0.1 mg/L was not exceeded at any location during either event in 2019.
- *Dissolved total chromium*. The NMWQCC standard of 0.05 mg/L was exceeded in 32 of 74 locations with a maximum concentration of 3.77 [3.97] mg/L (MW095) in spring 2019. The NMWQCC standard was exceeded at 26 of 63 locations, with a maximum concentration of 3.29 [3.58] mg/L (MW095) in fall 2019. Field duplicate results are presented in brackets. Figures 6 and 7 present dissolved chromium isoconcentrations during the spring 2019 and fall events, respectively.
- *Dissolved hexavalent chromium*. The NMWQCC standard of 0.05 mg/L was exceeded in 27 of 74 locations with a maximum concentration of 3.46 J [3.54] mg/L (MW095) in spring 2019. The NMWQCC standard was exceeded at 26 of 63 locations, with a maximum concentration of 3.02 [3.11 J] mg/L (MW095) in fall 2019. Figures 7 and 8 present dissolved hexavalent chromium isoconcentrations during the spring and fall 2019 events, respectively.
- *Dissolved iron*. The NMWQCC standard of 1 mg/L was exceeded in 10 of 74 locations, with a maximum concentration of 35.9 mg/L (MW008M) in spring 2019. The NMWQCC standard was exceeded at 5 of 63 locations, with a maximum concentration of 26.5 mg/L (MW008M) in fall 2019.
- *Dissolved manganese*. The NMWQCC standard of 0.2 mg/L was exceeded in 12 of 74 wells, with a maximum concentration of 12.5 mg/L (MW060) in spring 2019. The NMWQCC standard was exceeded at 11 of 63 locations, with a maximum concentration of 6.47 mg/L (MW060) in fall 2019.

2019 ANNUAL GROUNDWATER MONITORING REPORT

Results for the Spring and Fall 2019 sampling events are summarized in Tables 7 and 8, respectively. Historical results are presented in Appendices E and F.

2.4 Chromium and Chloride Trend Analysis

2.4.1 Mann-Kendall Methodology

Mann-Kendall analysis was used to evaluate concentration trends at select site wells. Wells were selected for trend analysis based on recent data completeness (i.e., at least five data points since the start of HS sampling in Spring 2016) and locations within the chromium and chloride plumes to serve as representatives of the conditions within the respective plume areas. Trends will be evaluated on an annual basis.

The Mann-Kendall trend test is a non-parametric test that determines trends based on ranked data. As such, it is relatively insensitive to outlier values and non-detect concentrations and does not require the data to fit a specific model. The basic Mann-Kendall trend test is performed by listing the concentrations of the constituent of interest in temporal order and computing the differences between a given measurement and earlier measurements (Gilbert 1987; USEPA 2009). The Mann-Kendall test statistic (sum of trend [S]) is the difference between the number of strictly positive differences and the number of strictly negative differences. If S is positive, an increasing trend is indicated; if S is negative, a decreasing trend is indicated; and if S is near zero, no trend is apparent. Trends with positive or negative S-statistics were accepted as statistically significant for p-values less than or equal to 0.1 (90% confidence level). The coefficient of variation (CV) is a quantitative measure that can be used to evaluate if concentrations are stable in cases where a statistically significant trend is not apparent. The CV is calculated as the standard deviation divided by the mean (average) concentration. CV values near or greater than 1 indicate variability in concentrations over time, while lower values indicate stability. Mann-Kendall analyses were performed on data collected after the sampling methodology change to HS that occurred site-wide in the spring of 2016.

2.4.2 Dissolved Chromium Trend Analysis Results

A table summarizing Mann-Kendall analyses and individual trend charts are presented in Appendix G. Results from the Mann-Kendall analyses indicate the following:

Western and Southern Plume (upgradient; off-site):

- MW094, located at the south eastern plume fringe, dissolved chromium concentrations ranged between 1.53 mg/L (April 2019) and 1.81 mg/L (May 2016), and indicate a statistically significant decreasing trend (Appendix G, Figure G-1). All concentrations since HS sampling began have exceeded the NMWQCC standard for dissolved chromium.
- MW058 dissolved chromium concentrations were between 2.46 mg/L (May 2016) and 3.16 mg/L (April 2019), and indicate a statistically significant increasing trend (Appendix G, Figure G-2). All concentrations since HS sampling began in spring 2016 have exceeded the NMWQCC standard for dissolved chromium.

2019 ANNUAL GROUNDWATER MONITORING REPORT

- MW013 dissolved chromium concentrations were between 0.943 mg/L (May 2016) and 2.54 mg/L (April 2019), and indicate a statistically significant increasing trend (Appendix G, Figure G-3). All concentrations since HS sampling began have exceeded the NMWQCC standard for dissolved chromium.

Eastern Plume (downgradient; off-site):

- MW041A concentrations ranged between 0.189 mg/L (May 2016) and 0.210 J mg/L (September 2017), and do not indicate a statistically significant trend (Appendix G, Figure G-4). The coefficient of variation of 0.04 indicate concentrations are stable. All concentrations since HS sampling began have exceeded the NMWQCC standard for dissolved chromium.
- MW051SA dissolved chromium concentrations have ranged between 0.0263 mg/L (May 2016) and 0.818 mg/L (May 2017). The timeframe for analysis was adjusted to include data 2017 to present, as the first data point (May 2016) is significantly lower. Mann-Kendall results of this adjusted time period indicate a statistically significant decreasing trend (Appendix G, Figure G-5). All concentrations since May 2017 have exceeded the NMWQCC standard for dissolved chromium.
- MW085SA, located just upgradient of the historical injection transect, dissolved chromium concentrations were between 0.0101 mg/L (May 2016) and 0.0559 mg/L (April 2019), and indicate a statistically significant increasing trend (Appendix G, Figure G-6). Only one result (April 2019) has exceeded the NMWQCC standard for dissolved chromium since HS sampling began.
- MW086SA, located downgradient of the historical injection transect, dissolved chromium concentrations have ranged between 0.0340 mg/L (September 2018) and 0.0762 mg/L (October 2019). Trend direction has been variable since HS sampling began, but, under visual observation, concentrations have been generally increasing since September 2018 (Appendix G, Figure G-7). Concentrations have exceeded the NMWQCC standard for dissolved chromium in three of the eight results collected since HS sampling began.

Given the direction of groundwater flow, is reasonable that assumed source area concentrations in the southwestern plume fringe are decreasing near MW094 and potentially migrating down6gradient within the existing plume to the areas represented by MW058 and MW013. Concentrations remaining stable near MW041A and decreasing at local hotspots (MW051SA) within the plume downgradient of the site, along with increased concentrations at the leading edge (MW085SA) with variable trends seen downgradient of historical treatment areas (MW086SA), may indicate a natural plume progression and potential rebound especially since no active treatment is implemented at this time. A summary map of the dissolved chromium trend analyses is provided in Appendix G, Figure G-18.

2.4.3 Chloride Trend Analysis Results

A table summarizing Mann-Kendall analyses and individual trend charts are presented in Appendix G. Results from the Mann-Kendall analyses indicate the following:

Western and Southern Plume (off-site):

- MW069, located on the western-most plume fringe, chloride concentrations were between 715 mg/L (September 2017) and 20,900 mg/L (May 2016). Trend direction has been variable and concentrations have been generally increasing since reaching its minimum in September 2017 (Appendix G, Figure G-8). All concentrations have exceeded the NMWQCC standard for chloride.

2019 ANNUAL GROUNDWATER MONITORING REPORT

- MW094 chloride concentrations ranged between 873 mg/L (May 2017) and 1,130 mg/L (May 2016), and do not indicate a statistically significant trend (Appendix G, Figure G-10). The low coefficient of variation value of 0.10 indicate concentrations are stable. All results since HS sampling began have exceeded the NMWQCC standard for chloride.
- MW058 chloride concentrations were between 995 J mg/L (May 2017) and 1,230 mg/L (March 2018) and do not indicate a statistically significant trend (Appendix G, Figure G-10). The low coefficient of variation of 0.09 indicate that concentrations are stable. All concentrations since HS sampling began have exceeded the NMWQCC standard chloride.
- MW013 chloride concentrations have ranged between 255 mg/L (September 2017) and 936 mg/L (May 2016), and do not indicate a statistically significant trend (Appendix G, Figure G-11). All results have exceeded the NMWQCC standard for chloride.

On-site Plume:

- MW047 chloride concentrations were between 272 mg/L (April 2019) and 498 mg/L (May 2017) and indicate a statistically significant decreasing trend (Appendix G, Figure G-12), however it should be noted that the October 2019 concentration increased to near 2016 levels. All results since HS sampling began have exceeded the NMWQCC standard for chloride.

Eastern Plume (off-site):

- MW041A chloride concentrations were between 377 mg/L (September 2017) and 488 mg/L (October 2019) and do not indicate a statistically significant trend (Appendix G, Figure G-13). However, under visual observation, concentrations have been generally increasing since September 2017. All results have exceeded the NMWQCC standard for chloride.
- MW051SA chloride concentrations were between 1,050 mg/L (May 2016 and October 2019) and 1,360 mg/L (April 2018) and do not indicate a statistically significant trend (Appendix G, Figure G-14). The low coefficient of variation value of 0.10 indicate that concentrations are stable. All results since HS sampling began have exceeded the NMWQCC standard for chloride.
- MW085SA, located just upgradient of the historical injection well transect, chloride concentrations have ranged from 1,210 mg/L (October 2019) and 1,650 mg/L (September 2018). Although not statistically significant, concentrations have been generally increasing overall since HS sampling began, but reached a peak and have been decreasing since September 2018 (Appendix G, Figure G-15). All concentrations have exceeded the NMWQCC standard for chloride.
- MW073SA, located just downgradient of the historical injection transect, chloride concentrations have been between 189 mg/L (March 2018) and 2,100 mg/L (October 2019). Although not statistically significant, concentrations have been generally increasing since HS sampling began (Appendix G, Figure G-16).
- MW086SA chloride concentrations have ranged between 1,040 mg/L (May 2016) and 1,470 mg/L (May 2017). The timeframe for analysis was adjusted to exclude 2016 results. Mann-Kendall results of this adjusted time period indicate a statistically significant decreasing trend (Appendix G, Figure G-17). All concentrations have exceeded the NMWQCC standard for chloride.

2019 ANNUAL GROUNDWATER MONITORING REPORT

Variable trend directions indicated at the assumed upgradient source area represented by MW069 potentially indicate that a chloride source is still contributing to the overall plume to a variable extent, however stable to decreasing trends within the central plume area (including on the site at MW047) could suggest that the impact of the upgradient source is not impacting the stability of the center of the plume at this time. Stable to potentially increasing concentrations downgradient of the site could indicate natural fluctuations within the plume footprint and potential concentration migration within the plume, especially since no active treatment is implemented at this time. Decreasing trends near the leading edge of the plume at MW086SA but potentially increasing trends at the southeastern edge (MW073SA) could indicate that plume is relatively stable at the leading edge. A summary map of the chloride trend analyses is provided in Appendix G, Figure G-19.

2019 ANNUAL GROUNDWATER MONITORING REPORT

This page intentionally left blank.

2019 ANNUAL GROUNDWATER MONITORING REPORT

3 SUMMARY

In summary, the 2019 monitoring and investigation activities indicated the following:

- Groundwater analytical results are consistent with historical concentrations observed.
- Mann-Kendall trend analyses indicate that the chloride plume is generally stable, while concentration trends for dissolved total chromium vary across the plume area, with an increasing trend seen along the leading edge of the plume. At this time, trend results appear to be within expectations for the chloride and chromium plumes, especially since no active treatment is currently implemented.

2019 ANNUAL GROUNDWATER MONITORING REPORT

This page intentionally left blank.

2019 ANNUAL GROUNDWATER MONITORING REPORT

4 REFERENCES

- Arcadis. 2017. 2017 Sampling and Analysis Plan, Former Eunice North Gas Plant, Eunice, New Mexico. March 9.
- Arcadis. 2019. 2018 Annual Groundwater Monitoring Report, Former Eunice North Gas Plant, Eunice, New Mexico. March 20.
- GHD. 2016. 2015 Annual Groundwater Monitoring Report, Former Eunice North Gas Plant, Eunice, Lea County, New Mexico. February.
- Gilbert, R.O. 1987. Statistical Methods for Environmental Pollution Monitoring. John Wiley and Sons, Inc. New York.
- U.S. Environmental Protection Agency (USEPA). 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities. Office of Resource Conservation and Recovery. Unified Guidance. EPA 530-R-09-007.

2019 ANNUAL GROUNDWATER MONITORING REPORT

This page intentionally left blank.

TABLES



Table 1
Summary of 2019 Groundwater Monitoring
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Monitoring Well ID	Groundwater Elevation	Field Water Quality Parameters	BTEX (8021B)	GRO (8015B)	DRO (8015B)	Dissolved Metals (6020A)	Hexavalent Chromium (7196A)	Chloride (300)	TDS (2540C)	Notes
IW003	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
IW008	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
IW010	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
IW019	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	
IW023	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
IW024	x/x	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW001	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	
MW002A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW004A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW006	x/x	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	LNAPL
MW007A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW008M	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW010	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW011A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW012M	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW013	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW015A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW016A	(x)/(x)	(x)/(x)	--/--	--/--	--/--	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	No access -- gate locked
MW018	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW019A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW020A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW021A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW023	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW024A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW026	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW027	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW030	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW031	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW032	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW037	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	
MW040A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW041A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW043	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	
MW044	(x)/--	(x)/--	(x)/--	(x)/--	(x)/--	(x)/--	(x)/--	(x)/--	(x)/--	No access -- well buried under road
MW045	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	
MW046A	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	x/x	
MW047	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW048SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW049SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW050SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW051SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW052SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW053SA	x/(x)	(x)/(x)	--/--	--/--	--/--	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	No access -- gate locked
MW054SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW055SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW056SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW057SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW058	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW059	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW060	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW061	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW062A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW063A	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW065SA	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW066SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW067SA	x/x	(x)/(x)	--/--	--/--	--/--	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	Obstruction in well / Insufficient water for sample
MW068	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW069	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW070	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW071SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	

Table 1
Summary of 2019 Groundwater Monitoring
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Monitoring Well ID	Groundwater Elevation	Field Water Quality Parameters	BTEX (8021B)	GRO (8015B)	DRO (8015B)	Dissolved Metals (6020A)	Hexavalent Chromium (7196A)	Chloride (300)	TDS (2540C)	Notes
MW072SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW073SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW074SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW075SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW076SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW078SA	x/(x)	(x)/(x)	--/--	--/--	--/--	(x)/(x)	(x)/(x)	(x)/(x)	(x)/(x)	Hydrasleeve dry / No access -- gate locked
MW079SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW084SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW085SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW086SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW087A	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW088M	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW089SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW090SA	x/x	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW093SA	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW094	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW095	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW097P	x/--	x/--	--/--	--/--	--/--	x/--	x/--	x/--	x/--	
MW099	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	
MW100	x/x	x/x	--/--	--/--	--/--	x/x	x/x	x/x	x/x	

Acronyms and Abbreviations:

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel-range organics

GRO = gasoline-range organics

ID = identification

LNAPL = light nonaqueous phase liquid

TDS = total dissolved solids

x/x = spring sampling event/fall sampling event

x = sample planned and collected

(x) = sample planned and not collected

-- = no sample planned during event

Table 2
2019 Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW003	04/09/2019	3406.68	44.18	NM	NA	3362.50
IW008	04/09/2019	3405.37	44.32	NM	NA	3361.05
IW010	04/09/2019	3405.82	51.98	NM	NA	3353.84
IW019	04/09/2019	3423.78	44.35	NM	NA	3379.43
IW019	10/07/2019	3423.78	44.57	NM	NA	3379.21
IW023	04/10/2019	3426.05	46.20	NM	NA	3379.85
IW023	10/07/2019	3426.05	46.52	NM	NA	3379.53
IW024	04/10/2019	3426.63	46.32	NM	NA	3380.31
IW024	10/07/2019	3426.63	46.65	NM	NA	3379.98
MW001	04/10/2019	3428.57	47.30	NM	NA	3381.27
MW001	10/07/2019	3428.57	47.60	NM	NA	3380.97
MW002A	04/10/2019	3432.30	51.13	NM	NA	3381.17
MW002A	10/07/2019	3432.30	51.22	NM	NA	3381.08
MW004A	04/10/2019	3423.57	43.52	NM	NA	3380.05
MW004A	10/07/2019	3423.57	43.84	NM	NA	3379.73
MW006	04/10/2019	3425.26	44.89	44.79	0.10	3380.45
MW006	10/07/2019	3425.26	45.19	45.05	0.14	3380.18
MW007A	04/10/2019	3428.13	46.58	NM	NA	3381.55
MW007A	10/07/2019	3428.13	46.86	NM	NA	3381.27
MW008M	04/10/2019	3427.95	48.55	NM	NA	3379.40
MW008M	10/07/2019	3427.95	48.76	NM	NA	3379.19
MW010	04/10/2019	3419.42	37.99	NM	NA	3381.43
MW010	10/07/2019	3419.42	38.30	NM	NA	3381.12
MW011A	04/10/2019	3431.77	49.91	NM	NA	3381.86
MW011A	10/07/2019	3431.77	50.11	NM	NA	3381.66
MW012M	04/10/2019	3430.06	47.92	NM	NA	3382.14
MW013	04/10/2019	3423.11	42.11	NM	NA	3381.00
MW013	10/08/2019	3423.11	42.27	NM	NA	3380.84
MW015A	04/10/2019	3420.55	38.10	NM	NA	3382.45
MW015A	10/07/2019	3420.55	38.36	NM	NA	3382.19
MW018	04/10/2019	3417.15	35.33	NM	NA	3381.82
MW018	10/07/2019	3417.15	39.65	NM	NA	3377.50
MW019A	04/09/2019	3414.74	35.55	NM	NA	3379.19
MW019A	10/07/2019	3414.74	37.99	NM	NA	3376.75
MW020A	04/09/2019	3421.14	41.72	NM	NA	3379.42
MW020A	10/07/2019	3421.14	41.95	NM	NA	3379.19
MW021A	04/09/2019	3422.94	45.47	NM	NA	3377.47
MW021A	10/07/2019	3422.94	45.73	NM	NA	3377.21
MW023	04/10/2019	3436.44	54.69	NM	NA	3381.75
MW023	10/07/2019	3436.44	54.85	NM	NA	3381.59
MW024A	04/09/2019	3430.77	50.37	NM	NA	3380.40
MW024A	10/07/2019	3430.77	50.57	NM	NA	3380.20
MW026	04/16/2019	3432.04	NM	NM	NA	NM
MW026	10/08/2019	3432.04	49.60	NM	NA	3382.44
MW027	04/16/2019	3443.33	62.91	NM	NA	3380.42

Table 2
2019 Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW027	10/07/2019	3443.33	61.89	NM	NA	3381.44
MW030	04/10/2019	3439.84	58.51	NM	NA	3381.33
MW030	10/07/2019	3439.84	58.60	NM	NA	3381.24
MW031	04/10/2019	3440.68	59.22	NM	NA	3381.46
MW031	10/07/2019	3440.68	59.46	NM	NA	3381.22
MW032	04/10/2019	3442.22	60.13	NM	NA	3382.09
MW032	10/08/2019	3442.22	60.15	NM	NA	3382.07
MW037	04/10/2019	3423.71	43.52	NM	NA	3380.19
MW037	10/07/2019	3423.71	44.04	NM	NA	3379.67
MW040A	04/16/2019	3422.92	40.97	NM	NA	3381.95
MW040A	10/07/2019	3422.92	41.16	NM	NA	3381.76
MW041A	04/09/2019	3418.42	40.51	NM	NA	3377.91
MW041A	10/07/2019	3418.42	41.11	NM	NA	3377.31
MW043	04/09/2019	3423.57	45.06	NM	NA	3378.51
MW043	10/07/2019	3423.57	45.34	NM	NA	3378.23
MW045	04/10/2019	3425.53	45.35	NM	NA	3380.18
MW045	10/07/2019	3425.53	45.59	NM	NA	3379.94
MW046A	04/10/2019	3426.45	46.00	NM	NA	3380.45
MW046A	10/07/2019	3426.45	46.25	NM	NA	3380.20
MW047	04/10/2019	3427.65	46.30	NM	NA	3381.35
MW047	10/07/2019	3427.65	46.60	NM	NA	3381.05
MW048SA	04/09/2019	3421.10	44.09	NM	NA	3377.01
MW048SA	10/07/2019	3421.10	44.43	NM	NA	3376.67
MW049SA	04/09/2019	3422.46	47.15	NM	NA	3375.31
MW049SA	10/07/2019	3422.46	42.44	NM	NA	3380.02
MW050SA	04/09/2019	3419.31	44.00	NM	NA	3375.31
MW050SA	10/07/2019	3419.31	44.22	NM	NA	3375.09
MW051SA	04/09/2019	3415.42	42.58	NM	NA	3372.84
MW051SA	10/07/2019	3415.42	43.00	NM	NA	3372.42
MW052SA	04/09/2019	3415.23	43.91	NM	NA	3371.32
MW052SA	10/07/2019	3415.23	44.21	NM	NA	3371.02
MW053SA	04/10/2019	3413.86	40.68	NM	NA	3373.18
MW054SA	04/09/2019	3411.38	44.03	NM	NA	3367.35
MW054SA	10/07/2019	3411.38	44.55	NM	NA	3366.83
MW055SA	04/09/2019	3407.43	40.51	NM	NA	3366.92
MW055SA	10/07/2019	3407.43	40.76	NM	NA	3366.67
MW056SA	04/09/2019	3410.71	40.95	NM	NA	3369.76
MW056SA	10/07/2019	3410.71	42.07	NM	NA	3368.64
MW057SA	04/09/2019	3417.74	44.86	NM	NA	3372.88
MW057SA	10/07/2019	3417.74	45.14	NM	NA	3372.60
MW058	04/10/2019	3437.13	55.77	NM	NA	3381.36
MW059	04/10/2019	3442.24	60.51	NM	NA	3381.73
MW059	10/07/2019	3442.24	60.62	NM	NA	3381.62
MW060	04/10/2019	3437.70	55.81	NM	NA	3381.89
MW060	10/07/2019	3437.70	55.97	NM	NA	3381.73

Table 2
2019 Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW061	04/10/2019	3439.86	55.26	NM	NA	3384.60
MW061	10/08/2019	3439.86	55.34	NM	NA	3384.52
MW062A	04/09/2019	3434.19	54.64	NM	NA	3379.55
MW062A	10/07/2019	3434.19	54.84	NM	NA	3379.35
MW063A	04/09/2019	3435.22	55.22	NM	NA	3380.00
MW063A	10/07/2019	3435.22	55.43	NM	NA	3379.79
MW065SA	04/09/2019	3402.96	48.71	NM	NA	3354.25
MW066SA	04/09/2019	3404.03	44.19	NM	NA	3359.84
MW066SA	10/07/2019	3404.03	45.09	NM	NA	3358.94
MW067SA	04/09/2019	3409.16	43.05	NM	NA	3366.11
MW067SA	10/07/2019	3409.16	44.42	NM	NA	3364.74
MW068	04/10/2019	3448.08	66.31	NM	NA	3381.77
MW068	10/07/2019	3448.08	66.44	NM	NA	3381.64
MW069	04/10/2019	3444.07	62.45	NM	NA	3381.62
MW069	10/07/2019	3444.07	62.56	NM	NA	3381.51
MW070	04/10/2019	3439.68	58.39	NM	NA	3381.29
MW070	10/07/2019	3439.68	58.46	NM	NA	3381.22
MW071SA	04/09/2019	3401.01	46.98	NM	NA	3354.03
MW071SA	10/07/2019	3401.01	47.17	NM	NA	3353.84
MW072SA	04/09/2019	3401.34	47.08	NM	NA	3354.26
MW072SA	10/07/2019	3401.34	47.51	NM	NA	3353.83
MW073SA	04/09/2019	3403.26	43.16	NM	NA	3360.10
MW073SA	10/07/2019	3403.26	45.22	NM	NA	3358.04
MW074SA	04/09/2019	3409.97	46.95	NM	NA	3363.02
MW074SA	10/07/2019	3409.97	46.94	NM	NA	3363.03
MW075SA	04/09/2019	3404.21	48.55	NM	NA	3355.66
MW075SA	10/07/2019	3404.21	48.43	NM	NA	3355.78
MW076SA	04/09/2019	3404.13	50.11	NM	NA	3354.02
MW076SA	10/07/2019	3404.13	50.04	NM	NA	3354.09
MW078SA	04/10/2019	3411.12	38.94	NM	NA	3372.18
MW079SA	04/09/2019	3408.80	43.43	NM	NA	3365.37
MW079SA	10/07/2019	3408.80	44.61	NM	NA	3364.19
MW084SA	04/09/2019	3405.98	49.21	NM	NA	3356.77
MW084SA	10/07/2019	3405.98	49.09	NM	NA	3356.89
MW085SA	04/09/2019	3405.98	49.53	NM	NA	3356.45
MW085SA	10/07/2019	3405.98	49.42	NM	NA	3356.56
MW086SA	04/09/2019	3401.86	48.08	NM	NA	3353.78
MW086SA	10/07/2019	3401.86	48.17	NM	NA	3353.69
MW087A	04/10/2019	3430.75	48.97	NM	NA	3381.78
MW088M	04/10/2019	3430.27	48.34	NM	NA	3381.93
MW088M	10/07/2019	3430.27	48.55	NM	NA	3381.72
MW089SA	04/10/2019	3428.09	47.27	NM	NA	3380.82
MW089SA	10/07/2019	3428.09	47.57	NM	NA	3380.52
MW090SA	04/10/2019	3428.33	47.78	NM	NA	3380.55
MW090SA	10/07/2019	3428.33	48.09	NM	NA	3380.24

Table 2
2019 Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW093SA	04/10/2019	3422.72	43.22	NM	NA	3379.50
MW093SA	10/07/2019	3422.72	43.82	NM	NA	3378.90
MW094	04/10/2019	3443.15	61.10	NM	NA	3382.05
MW095	04/10/2019	3436.13	54.19	NM	NA	3381.94
MW095	10/07/2019	3436.13	54.29	NM	NA	3381.84
MW097P	04/10/2019	NM	46.30	NM	NA	--
MW099	04/10/2019	3444.76	DRY	NM	NA	NM
MW099	10/07/2019	3444.76	62.37	NM	NA	3382.39
MW100	04/09/2019	3406.49	51.72	NM	NA	3354.77
MW100	10/07/2019	3406.49	51.71	NM	NA	3354.78

Note:

1. Corrected groundwater elevations at MW006 are corrected using an assumed LNAPL specific gravity of 0.75. The formula used to correct groundwater elevation is as follows:

$$\text{Corrected GW Elevation} = \text{TOC Elevation} - (\text{DTW} - \text{LNAPL Thickness} * \text{LNAPL Specific Gravity})$$

Acronyms and Abbreviations:

amsl = above mean sea level
 btoc = below top of casing
 DTW = depth to groundwater
 GW = groundwater
 ID = identification
 LNAPL = light nonaqueous phase liquid
 NA = not applicable
 NM = not measured
 TOC = top of casing

Table 3
Spring 2019 Field Parameters
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
		mg/L	mV	SU	mS/cm	°C	NTU
IW003	4/15/2019	2.79	-82	6.38	3.02	22.64	0.00
IW008	4/12/2019	1.85	-107	6.45	3.95	16.68	0.00
IW010	4/12/2019	2.65	-107	6.22	5	15.65	10.9
IW019	4/16/2019	2.15	158	6.65	5.24	21.2	0.00
IW023	4/16/2019	3.12	177	6.67	8.49	24.26	18.6
IW024	4/16/2019	0.00	202.9	7.22	2.969	24.3	1555.7
MW001	4/17/2019	2.44	-38	6.47	4.17	20.03	0.00
MW002A	4/17/2019	2.12	-42	6.68	5.8	20.58	0.00
MW004A	4/16/2019	0.00	118.5	7.55	3.615	24.51	1558.2
MW007A	4/17/2019	2.64	8	6.72	5.07	20.02	0.00
MW008M	4/17/2019	2.19	-67	5.77	7.66	21.11	128
MW010	4/16/2019	0.00	248.6	7.03	5.263	23.95	1551.5
MW011A	4/17/2019	1.97	15	6.46	1.97	21.58	0.00
MW012M	4/17/2019	1.49	-105	6.49	5.68	23.09	0.00
MW013	4/16/2019	0.00	221.5	7.27	5.227	23.52	1545.9
MW015A	4/16/2019	0.00	62.1	6.46	14.32	23	1540
MW018	4/16/2019	4.78	73	6.93	1.77	23.85	0.00
MW019A	4/16/2019	2.15	158	6.65	5.24	21.2	0.00
MW020A	4/16/2019	2.52	163	6.7	4.41	23.93	0.00
MW021A	4/12/2019	2.16	73	6.44	8.28	20.09	0.00
MW023	4/15/2019	0.00	101.1	7.31	4.925	23.16	0.00
MW024A	4/12/2019	0.00	145.3	7.33	3.766	18.96	1502.9
MW026	4/16/2019	0.00	220.6	7.73	1.232	25.44	1569.9
MW027	4/16/2019	0.00	199.4	7.59	2.484	25.06	1564
MW030	4/12/2019	0.00	67.4	7.49	1.232	21.37	1528.9
MW031	4/15/2019	0.00	-155.6	6.92	1.706	25.39	1577.9
MW032	4/16/2019	0.00	117.9	7.65	2.262	23.73	1550.1
MW037	4/16/2019	0.00	-88.8	6.91	3.023	24.72	1560
MW040A	4/16/2019	0.00	233.6	7.82	1.014	22.63	1530
MW041A	4/16/2019	3.69	160	6.86	2.56	18.92	0.00
MW043	4/15/2019	1.9	57	6.24	2.77	19.53	0.00
MW045	4/17/2019	2.42	118	6.44	2.36	22.81	0.00
MW046A	4/17/2019	3.07	94	6.85	4.51	21.36	133
MW047	4/17/2019	4.71	124	6.63	2.72	19.62	0.00
MW048SA	4/16/2019	3.2	163	6.92	3.17	18.72	0.00
MW049SA	4/16/2019	6.81	163	6.84	4.62	18.47	0.00
MW050SA	4/15/2019	2.41	100	6.92	4.62	19.39	0.00
MW051SA	4/15/2019	2.18	98	6.49	4.76	20.01	0.00
MW052SA	4/16/2019	3.2	170	6.71	3.6	18.18	0.00
MW054SA	4/16/2019	4.63	173	6.91	3.6	17.13	6.3
MW055SA	4/12/2019	4.85	4	6.79	2.85	19.35	0.00
MW056SA	4/17/2019	3.61	68	6.36	5.89	21.88	0.00
MW057SA	4/15/2019	4.72	44	6.5	2.48	18.24	11.98
MW058	4/12/2019	0.00	121.4	7.15	6.203	21.32	1528.1

Table 3
Spring 2019 Field Parameters
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
		mg/L	mV	SU	mS/cm	°C	NTU
MW059	4/15/2019	0.00	127.4	7.25	4.832	23.82	83
MW060	4/16/2019	0.00	-86.1	7.05	6.285	20.62	1505
MW061	4/16/2019	0.00	-29.4	7.35	5.055	21.18	1518.3
MW062A	4/12/2019	8.61	141.2	6.96	0.863	18.13	0.00
MW063A	4/12/2019	0.00	130.5	7.66	0.811	19.34	1505.6
MW065SA	4/11/2019	1.99	116	7.44	4.18	20.51	0.00
MW066SA	4/11/2019	3.38	118	7.46	3.22	20.09	0.00
MW068	4/15/2019	0.00	247.3	6.7	21.733	24.26	1562.7
MW069	4/15/2019	0.00	202.9	6.44	24.238	26.18	1562.7
MW070	4/12/2019	0.00	4.2	7.27	2.058	22.1	1537.4
MW071SA	4/11/2019	1.63	106	7.58	2.41	20.1	0.5
MW072SA	4/11/2019	4.26	103	7.85	1.8	20.53	12.4
MW073SA	4/11/2019	3.13	113	7.47	3.18	20.91	12.4
MW074SA	4/12/2019	4.89	4	6.74	2.39	19.53	0.00
MW075SA	4/11/2019	4.52	89	7.55	2.89	17.88	0.00
MW076SA	4/11/2019	4.42	48	7.64	3.13	17.89	8.9
MW079SA	4/15/2019	2.37	48	6.35	1.9	21.57	0.00
MW084SA	4/11/2019	2.65	104	7.29	4.58	17.57	0.00
MW085SA	4/11/2019	2.15	109	7.37	5.79	17.37	0.00
MW086SA	4/11/2019	2.1	109	7.41	5.37	17.04	0.00
MW087A	4/17/2019	1.73	-48	6.53	6.46	21.69	0.00
MW088M	4/17/2019	1.59	-66	6.32	5.94	21.94	9.9
MW089SA	4/17/2019	4.5	224	6.55	6.18	18.83	0.00
MW090SA	4/17/2019	4.5	227	6.54	4.28	18.11	0.00
MW093SA	4/16/2019	2.17	131	6.65	5.09	26.56	0.00
MW094	4/16/2019	0.00	66.9	7.42	3.499	22.88	1541.2
MW095	4/16/2019	0.00	152.6	6.34	5.973	17.79	27.1
MW097P	4/16/2019	1.37	-79	6.73	5.1	24.3	0.00
MW099	4/12/2019	0.00	-162.7	7.66	0.834	20.75	1521.6
MW100	4/11/2019	1.93	-34	7.33	3.5	16.43	0.00

Acronyms and Abbreviations:

ID = identification

mg/L = milligrams per liter

mV = millivolts

NTU = nephelometric turbidity unit

SU = standard unit

°C = degrees Celsius

µS/cm = microSiemens per centimeter

Table 4
Fall 2019 Field Parameters
2018 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
		mg/L	mV	SU	µS/cm	°C	NTU
IW019	10/10/2019	0.57	-20	6.95	4,360	20.22	37.3
IW023	10/10/2019	3.90	40	7.32	3,820	24.08	3.5
MW001	10/10/2019	0.23	-64	6.58	3,390	19.16	0.0
MW002A	10/10/2019	1.30	47	7.12	4,650	29.77	57.3
MW004A	10/11/2019	4.86	-3	7.34	3,330	14.79	17.9
MW007A	10/11/2019	8.08	-79	7.24	4,260	11.22	39.5
MW008M	10/10/2019	1.19	-92	6.42	5,960	25.23	72.1
MW010	10/10/2019	1.75	159	6.73	6,800	22.75	2.8
MW011A	10/10/2019	1.10	41	7.35	2,530	22.78	9.3
MW013	10/10/2019	4.25	214	6.56	3,460	20.50	13.3
MW015A	10/9/2019	8.34	-72	6.73	5,490	25.14	3.3
MW018	10/9/2019	4.39	119	7.31	2,310	22.46	0.0
MW019A	10/9/2019	1.62	117	7.40	1,290	22.09	0.0
MW020A	10/9/2019	1.49	152	6.86	3,950	23.96	0.0
MW021A	10/10/2019	0.00	81	6.75	8,020	21.63	0.0
MW023	10/8/2019	6.94	142	6.91	3,970	22.55	0.0
MW024A	10/8/2019	4.20	244	6.19	3,550	16.21	14.2
MW026	10/11/2019	6.08	-2	7.47	1,180	13.09	24.2
MW027	10/9/2019	5.88	54	7.70	2,250	29.94	18.1
MW030	10/8/2019	4.97	120	7.32	893	23.55	11.1
MW031	10/9/2019	2.27	-4	7.15	1,220	18.72	44.5
MW032	10/9/2019	5.18	122	7.32	1,880	26.64	12.9
MW037	10/10/2019	0.00	-128	6.80	2,550	21.27	0.0
MW040A	10/10/2019	4.16	149	7.44	769	21.19	2.3
MW041A	10/9/2019	2.79	115	7.05	2,180	29.52	0.0
MW043	10/10/2019	0.01	-80	6.99	3,160	21.27	24.2
MW045	10/10/2019	0.02	50	6.94	1,910	20.63	0.0
MW046A	10/10/2019	1.10	39	7.08	40,100	20.15	0.0
MW047	10/11/2019	2.35	-52	6.88	3,690	10.42	15.2
MW048SA	10/9/2019	3.96	102	7.25	2,830	19.65	15.4
MW049SA	10/9/2019	7.37	108	7.21	4,260	19.79	44.4
MW050SA	10/9/2019	0.27	122	7.07	5,050	24.32	0.0
MW051SA	10/10/2019	1.08	47	7.06	4,470	24.91	0.0
MW052SA	10/9/2019	1.35	110	7.05	4,910	19.80	18.1
MW054SA	10/9/2019	0.93	115	6.99	2,920	19.92	0.0
MW055SA	10/8/2019	4.77	32	7.33	2,860	22.07	2.3
MW056SA	10/9/2019	2.63	115	6.98	5,050	18.11	1.4
MW057SA	10/9/2019	2.65	108	7.02	2,240	18.86	0.0
MW059	10/8/2019	5.05	140	7.18	4,040	23.48	47.5
MW060	10/9/2019	2.01	-89	7.18	4,920	21.06	52.7
MW061	10/9/2019	2.03	48	7.83	3,940	21.71	76.4
MW062A	10/8/2019	5.53	130	7.36	814	17.42	0.0
MW063A	10/8/2019	3.94	128	7.56	655	18.32	0.0
MW066SA	10/8/2019	3.32	37	7.15	2,550	20.87	28.5
MW068	10/9/2019	2.75	-4	7.43	7,520	21.49	26.7
MW069	10/9/2019	2.15	27	6.78	18,300	21.81	0.0
MW070	10/8/2019	3.37	144	7.18	1,730	25.05	0.0
MW071SA	10/8/2019	1.53	21	7.24	2,380	21.38	141
MW072SA	10/9/2019	4.60	116	7.14	1,740	17.89	28.7
MW073SA	10/9/2019	2.52	174	6.55	6,540	17.62	0.0
MW074SA	10/8/2019	5.03	143	6.41	2,580	14.83	54.5
MW075SA	10/8/2019	4.60	82	7.56	2,880	17.69	5.3
MW076SA	10/8/2019	4.33	75	7.53	4,330	18.16	0.0
MW079SA	10/9/2019	0.73	107	6.98	1,680	18.80	0.0
MW084SA	10/8/2019	2.24	85	7.77	4,490	16.57	31.5
MW085SA	10/8/2019	0.65	95	7.01	5,930	16.65	10.5
MW086SA	10/8/2019	0.37	40	6.95	4,570	21.78	48
MW088M	10/10/2019	0.69	-81	6.69	4,810	23.50	57.7
MW089SA	10/11/2019	3.27	37	7.22	4,500	12.57	26.3
MW093SA	10/10/2019	0.30	71	6.76	4,680	23.52	0.0
MW095	10/9/2019	1.36	64	7.05	5,060	19.06	48.9
MW099	10/9/2019	9.72	-31	6.31	671	18.60	17
MW100	10/8/2019	0.25	-158	7.51	1,390	18.68	141

Acronyms and Abbreviations:

ID = identification

mg/L = milligrams per liter

mV = millivolts

NTU = nephelometric turbidity unit

SU = standard unit

°C = degrees Celsius

µS/cm = microSiemens per centimeter

Table 5
Spring 2019 BTEX Analytical Data
2018 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Analyte	Benzene		Toluene		Ethylbenzene		Total Xylenes		DRO		GRO	
		Unit	mg/L											
		NMWQCC Standard	0.005		1		0.7		0.62		NA		NA	
		Sample Purpose												
IW019	4/16/2019	REG	0.002	U	0.002	U	0.002	U	0.002	U	1.5	U	1.5	U
MW001	4/17/2019	REG	0.002	U	0.002	U	0.002	U	0.002	U	1.5	U	1.5	U
IW019	4/16/2019	FD	0.002	U	0.002	U	0.002	U	0.002	U	1.5	U	1.5	U
MW037	4/16/2019	REG	0.719	D	0.00039	J	0.134		0.00272		2.87		3.22	
MW043	4/15/2019	REG	0.002	U	0.002	U	0.002	U	0.00234		1.5	U	1.5	U
MW045	4/17/2019	REG	0.002	U	0.002	U	0.002	U	0.002	U	1.5	U	1.5	U
MW045	4/17/2019	FD	0.002	U	0.002	U	0.002	U	0.002	U	1.5	U	1.5	U
MW046A	4/17/2019	REG	0.002	U	0.002	U	0.002	U	0.002	U	1.5	U	1.5	U

Notes:

bold = detected analytes

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel-range organics

FD = field duplicate sample

GRO = gasoline-range organics

ID = identification

mg/L = milligrams per liter

NMWQCC = New Mexico Water Quality Control Commission

REG = regular field sample

shading = analytes exceeding the NMWQCC Standard

NA = not applicable- no standard available

** = one-time sample collected but not included in Sampling and Analysis Plan

Qualifiers:

D = diluted sample

J = estimated value

U = nondetect

Table 6
Fall 2019 BTEX Analytical Data
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date Sampled	Analyte	Benzene		Toluene		Ethylbenzene		Total Xylenes		DRO		GRO	
		Unit	mg/L											
		NMWQCC Standard	0.005		1		0.7		0.62		NA		NA	
		Sample Purpose												
IW019	10/10/2019	REG	0.002	U	0.002	U	0.002	UJ	0.002	U	2.12	U	2.12	U
MW001	10/10/2019	REG	0.002	U	0.002	U	0.002	UJ	0.002	U	2.14	U	2.14	U
MW037	10/10/2019	REG	0.0926		0.002	U	0.0136	J	0.002	U	1.56	J	1.37	J
MW043	10/10/2019	REG	0.002	U	0.002	U	0.002	UJ	0.002	U	2.16	U	1.12	J
MW045	10/10/2019	REG	0.002	U	0.002	U	0.002	UJ	0.002	U	2.2	U	2.2	U
MW046A	10/10/2019	REG	0.002	U	0.002	U	0.002	UJ	0.002	U	2.16	U	2.16	U

Notes:

bold = detected analytes

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel-range organics

FD = field duplicate sample

GRO = gasoline-range organics

ID = identification

mg/L = milligrams per liter

NMWQCC = New Mexico Water Quality Control Commission

REG = regular field sample

NA = not applicable- no standard available

shading = analytes exceeding the NMWQCC Standard

Qualifiers:

J = estimated value

U = nondetect

Table 7
Spring 2019 Metals, Chloride, and Total Dissolved Solids Analytical Data
2018 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Analyte	Dissolved Arsenic	Dissolved Total Chromium	Dissolved Hexavalent Chromium	Dissolved Iron		Dissolved Manganese		TDS	Chloride			
		Unit	mg/L											
		NMWQCC Standard	0.1	0.05	0.05	1	0.2	1000	250					
IW003	4/15/2019	REG	0.0157	0.0088	0.01	U	5.02	3.74	2,410	1,130				
IW008	4/12/2019	REG	0.0235	0.00388	J	0.01	U	4.78	1.9	2,160	875			
IW010	4/12/2019	REG	0.00899	0.00202	J	0.0031	J	11.8	7.96	3,120	2,280			
IW019	4/16/2019	REG	0.00987	0.672		0.664	J	0.139		3,310	1,130			
IW019	4/16/2019	FD	0.0106	J	0.736	0.698	0.5	U	0.105	3,190	361			
IW023	4/16/2019	REG	0.00961	0.345		0.315	J	0.00282		2,790	765			
IW024	4/16/2019	REG	0.0113	1.21		1.02		0.0288		4,350	817			
MW001	4/17/2019	REG	0.00174	J	0.00142	J	0.01	U	0.858	2,570	451			
MW002A	4/17/2019	REG	0.0193		0.889	0.0089	J	1	U	0.0201	3,420	1,430		
MW004A	4/16/2019	REG	0.0156		0.558	0.459		0.1	U	0.000551	J	1,080	550	
MW007A	4/17/2019	REG	0.0109		0.711	0.66		1	U	0.000644	J	3,350	792	
MW008M	4/17/2019	REG	0.00329	J	0.0071	0.0043	J	35.9	2.95	5,040	1,350			
MW010	4/16/2019	REG	0.00885	J	0.0273	0.0213		0.5	U	0.01	U	4,160	2,380	
MW011A	4/17/2019	REG	0.0144		0.159	0.01	U	0.1	U	0.182		1,930	511	
MW012M	4/17/2019	REG	0.0652		0.0306	0.01	U	3.94	0.0507	3,130	800			
MW013	4/16/2019	REG	0.00809		2.54	2.22	J	0.1	U	0.002	U	2,940	859	
MW015A	4/16/2019	REG	0.0136	J	0.00983	J	0.01	UJ	0.5	U	0.00203	J	6,120	4,250
MW018	4/16/2019	REG	0.0124		0.004	U	0.01	U	0.0574	J	0.00194	J	1,600	455
MW019A	4/16/2019	REG	0.00627		0.000853	J	0.01	U	0.0538	J	0.0179		1,110	303
MW020A	4/16/2019	REG	0.0111	J	0.0056	J	0.01	U	0.5	U	0.00112	J	2,180	1,320
MW020A	4/16/2019	FD	0.0106	J	0.00511	0.01	U	0.5	U	0.00123	J	2,140	1,060	
MW021A	4/12/2019	REG	0.011		0.00295	J	0.01	U	0.1	U	0.0126		5,150	1,020
MW023	4/15/2019	REG	0.00878		2.22	2.07		0.0352	J	0.00488		3,150	860	
MW024A	4/12/2019	REG	0.0119		0.5	0.474		0.1	U	0.002	U	2,140	997	
MW026	4/16/2019	REG	0.00768		0.004	U	0.01	UJ	0.1	U	0.000977	J	696	104
MW027	4/16/2019	REG	0.00653		0.00139	J	0.01	UJ	0.0457	J	0.00129	J	1,550	367
MW030	4/12/2019	REG	0.0197		0.00126	J	0.01	U	0.1	U	0.000594	J	694	220
MW031	4/15/2019	REG	0.0847		0.004	U	0.01	U	3.36	0.866		874	263	
MW032	4/16/2019	REG	0.0037	J	0.00473	0.01	UJ	0.1	U	0.00172	J	1,340	J	386
MW032	4/16/2019	FD	0.00315	J	0.00505	0.01	U	0.023	J	0.00127	J	372	J	374
MW037	4/16/2019	REG	0.0546		0.00116	J	0.01	U	8.05	0.0493		1,320	405	
MW040A	4/16/2019	REG	0.0203		0.00285	J	0.01	UJ	0.1	U	0.000271	J	481	56.4
MW041A	4/16/2019	REG	0.0104		0.201	0.175		0.1	U	0.00107	J	1,530	461	
MW043	4/15/2019	REG	0.00504		0.000894	J	0.01	U	0.593	0.573		1,840	843	
MW045	4/17/2019	REG	0.00232	J	0.012	0.01	U	0.0767	J	0.0782		1,460	76	
MW045	4/17/2019	FD	0.00221	J	0.0111	0.01	U	0.0544	J	0.0736		1,400	77	
MW046A	4/17/2019	REG	0.0103		1.49	1.73		1	U	0.00333		3,260	745	
MW047	4/17/2019	REG	0.0116		0.0809	0.0709		0.0228	J	0.000519	J	968	272	
MW048SA	4/16/2019	REG	0.0121		0.396	0.363		0.0259	J	0.00124	J	1,860	607	
MW049SA	4/16/2019	REG	0.0125	J	0.2	0.176		0.5	U	0.01	U	2,530	1,320	
MW050SA	4/15/2019	REG	0.00854		0.329	0.29		0.1	U	0.0191		3,500	1,420	
MW051SA	4/15/2019	REG	0.0126		0.779	0.733		0.1	U	0.00822		3,160	1,220	
MW052SA	4/16/2019	REG	0.0138		0.246	0.224		0.11		0.00376		3,060	1,590	
MW054SA	4/16/2019	REG	0.0109		0.122	0.117		0.227		0.0073		1,910	951	
MW055SA	4/12/2019	REG	0.00749		0.177	0.157		0.1	U	0.000651	J	1,700	653	
MW056SA	4/17/2019	REG	0.0137		0.382	0.01	U	0.2	U	0.00042	J	3,650	1,120	
MW057SA	4/15/2019	REG	0.0124		0.0385	0.0343		0.085	J	0.0034		1,500	357	
MW058	4/12/2019	REG	0.0127		3.16	2.74		0.1	U	0.002	U	4,180	1,150	
MW058	4/12/2019	FD	0.013		3.25	2.9		0.1	U	0.002	U	3,900	1,040	
MW059	4/15/2019	REG	0.0148		0.46	0.401		0.1	U	0.00107	J	2,950	891	
MW060	4/16/2019	REG	0.00265	J	0.00195	J	0.01	UJ	0.796	12.5		3,390	1,670	
MW061	4/16/2019	REG	0.0114		1.38	1.51	J	0.0231	J	0.0246		3,980	1,180	
MW062A	4/12/2019	REG	0.0249		0.002	J	0.01	U	0.1	U	0.002	U	474	62.9
MW063A	4/12/2019	REG	0.0244		0.0016	J	0.01	U	0.1	U	0.000653	J	459	58.5
MW065SA	4/11/2019	REG	0.0103		0.0134	0.0069	J	0.1	U	0.0107		2,590	1,050	
MW066SA	4/11/2019	REG	0.00974		0.0179	0.0065	J	0.0678	J	0.0699		2,040	836	
MW068	4/15/2019	REG	0.018	J	0.02	U	0.01	U	1.66	2.87		10,500	7,100	
MW069	4/15/2019	REG	0.0113	J	0.02	U	0.01	U	0.5	U	0.0902		14,800	9,650
MW070	4/12/2019	REG	0.0141		0.004	U	0.01	U	0.0443	J	0.000935	J	1,130	444
MW071SA	4/11/2019	REG	0.00836		0.00587	0.01	U	0.0284	J	0.216		1,490	636	
MW072SA	4/11/2019	REG	0.0186		0.004	U	0.01	U	0.0464	J	0.00182	J	1,050	218
MW073SA	4/11/2019	REG	0.0102		0.004	U	0.01	U	0.1	U	0.00344		2,020	1,000
MW074SA	4/12/2019	REG	0.0151		0.00508	0.01	U	0.0318	J	0.000585	J	1,520	384	
MW075SA	4/11/2019	REG	0.0134		0.0128	0.0094	J	0.1	U	0.000224	J	1,770	466	
MW076SA	4/11/2019	REG	0.0123		0.0119	0.0143		0.225	0.00388		1,950	601		
MW079SA	4/15/2019	REG	0.00583		0.00103	J	0.01	U	0.581	0.0511		1,140	271	
MW084SA	4/11/2019	REG	0.00962		0.0205	0.0167		0.415	0.0177		5,910	1,220		
MW085SA	4/11/2019	REG	0.0141		0.0559	0.0236		0.319	0.0265		3,660	1,580		
MW086SA	4/11/2019	REG	0.0116		0.0482	0.0385		0.0839	J	0.00235		3,160	1,370	
MW087A	4/17/2019	REG	0.0012	J	0.0423	0.0049	J	3.56	0.185		3,840	1,190		

Table 7
Spring 2019 Metals, Chloride, and Total Dissolved Solids Analytical Data
2018 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico

Location ID	Date	Analyte	Dissolved Arsenic	Dissolved Total Chromium	Dissolved Hexavalent Chromium	Dissolved Iron	Dissolved Manganese	TDS	Chloride	
		Unit	mg/L							
		NMWQCC Standard	0.1	0.05	0.05	1	0.2	1000	250	
MW088M	4/17/2019	REG	0.0217	0.138	0.01	1.72	1.26	3,690	957	
MW089SA	4/17/2019	REG	0.0107	1.1	1.06	1	0.00835	4,260	934	
MW090SA	4/17/2019	REG	0.0096	0.265	0.31	0.1	0.000728	2,210	520	
MW093SA	4/16/2019	REG	0.00811	0.405	0.365	0.0483	0.244	3,220	984	
MW094	4/16/2019	REG	0.0108	1.53	1.88	0.134	0.0141	3,860	1,070	
MW095	4/16/2019	REG	0.0093	3.77	3.46	0.242	0.147	3,760	1,500	
MW095	4/16/2019	FD	0.00823	3.97	3.54	0.239	0.126	5,320	1,410	
MW097P	4/16/2019	REG	0.0111	0.479	0.36	0.5	0.0557	3,480	1,010	
MW099	4/12/2019	REG	0.00744	0.004	0.01	0.0423	0.18	453	73	
MW100	4/11/2019	REG	0.0106	0.00733	0.01	0.36	0.299	1,900	948	
MW100	4/11/2019	FD	0.0106	0.00692	0.01	0.345	0.303	1,970	976	

Acronyms and Abbreviations:

bold = detected analytes
 FD = field duplicate sample
 ID = identification
 mg/L = milligrams per liter

NMWQCC = New Mexico Water Quality Control Commission

REG = regular field sample

TDS = total dissolved solids

shading = analytes exceeding the NMWQCC Standard

-- = data not available

Qualifiers:

J = estimated value

U = nondetect

Table 8
Fall 2019 Metals, Chloride, and Total Dissolved Solids Analytical Data
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Analyte	Dissolved Arsenic	Dissolved Total Chromium	Dissolved Hexavalent Chromium	Dissolved Iron		Dissolved Manganese		TDS	Chloride
		Unit	mg/L								
		NMWQCC Standard	0.1	0.05	0.05	1	0.2	1000	250		
IW019	10/10/2019	REG	0.00931	0.621	0.609	0.1	U	0.0482	J	3,770	1,120
IW023	10/10/2019	REG	0.00981	0.315	0.312	0.0668	J	0.00412	J	3,040	33.3
MW001	10/10/2019	REG	0.0016	0.00176	0.01	0.1	U	0.954	J	2,680	498
MW002A	10/10/2019	FD	0.0192	0.917	0.79	0.1	U	0.019	J	3,430	1,390
MW002A	10/10/2019	REG	0.0177	0.812	0.758	0.1	U	0.0163	J	3,410	1,630
MW004A	10/11/2019	REG	0.0148	0.415	0.378	0.5	U	0.01	U	2,230	635
MW007A	10/11/2019	REG	0.0113	0.676	0.592	0.5	U	0.00257	J	2,980	843
MW008M	10/10/2019	REG	0.00362	0.00693	0.0071	26.5		2.8	J	4,680	1,530
MW010	10/10/2019	FD	0.00883	0.016	0.0135	0.1	U	0.00284	J	5,300	2,520
MW010	10/10/2019	REG	0.00811	0.02	0.088	0.1	U	0.00474	J	5,330	2,450
MW011A	10/10/2019	REG	0.0133	0.1	0.0834	0.1	U	0.167	J	1,800	433
MW013	10/10/2019	REG	0.00767	1.97	1.75	0.0266	J	0.000714	J	3,220	814
MW015A	10/9/2019	REG	0.012	0.0127	0.0048	0.0304	J	0.00551		9,970	5,480
MW018	10/9/2019	REG	0.0103	0.004	0.01	0.1	U	0.000437	J	1,650	502
MW019A	10/9/2019	REG	0.0103	0.000533	0.01	0.1	U	0.00424		1,200	346
MW020A	10/9/2019	REG	0.00988	0.00604	0.0063	0.1	U	0.000518	J	2,560	1,260
MW021A	10/10/2019	REG	0.0113	0.00301	0.01	0.0228	J	0.0166	J	5,810	2,360
MW023	10/8/2019	REG	0.00946	2.75	2.32	0.1	U	0.002	U	3,360	716
MW024A	10/8/2019	REG	0.0128	0.504	0.457	0.1	U	0.002	U	2,470	790
MW026	10/11/2019	REG	0.00801	0.004	0.01	0.1	U	0.000348	J	741	105
MW027	10/9/2019	REG	0.00685	0.00107	0.01	0.1	U	0.000539	J	1,610	358
MW030	10/8/2019	REG	0.0204	0.00156	0.01	0.0382	J	0.000554	J	715	190
MW031	10/9/2019	FD	0.055	0.004	0.01	2.08	J	0.818		866	243
MW031	10/9/2019	REG	0.0962	0.004	0.0057	4.93	J	0.833		876	230
MW032	10/9/2019	REG	0.00362	0.00407	0.0035	0.1	U	0.000854	J	1,390	428
MW037	10/10/2019	REG	0.0538	0.00111	0.0131	7.15		0.0537	J	1,440	559
MW040A	10/10/2019	REG	0.02	0.00312	0.01	0.1	U	0.002	UJ	526	55.8
MW041A	10/9/2019	REG	0.0104	0.193	0.178	0.1	U	0.000914	J	1,620	488
MW043	10/10/2019	REG	0.00503	0.000528	0.01	0.257		0.499	J	2,000	862
MW045	10/10/2019	REG	0.00203	0.0103	0.01	0.1	U	0.0751	J	1,330	79.7
MW046A	10/10/2019	REG	0.0103	2.08	2.19	0.108		0.00398	J	3,080	719
MW047	10/11/2019	REG	0.00113	0.00379	0.01	0.056	J	1.13		2,650	486
MW048SA	10/9/2019	REG	0.0115	0.369	0.36	0.0356	J	0.00168	J	2,900	631
MW049SA	10/9/2019	REG	0.013	0.246	0.187	0.123		0.00393		2,800	1,210
MW050SA	10/9/2019	REG	0.00869	0.394	0.355	0.1	U	0.0158		3,800	1,450
MW051SA	10/10/2019	REG	0.0119	0.699	0.658	0.0345	J	0.00252	J	3,330	1,050
MW052SA	10/9/2019	REG	0.0119	0.201	0.239	0.1	U	0.000382	J	3,040	1,470
MW054SA	10/9/2019	REG	0.0105	0.117	0.114	0.1	U	0.000327	J	1,940	913
MW055SA	10/8/2019	REG	0.00745	0.178	0.169	0.1	U	0.00025	J	1,810	574
MW056SA	10/9/2019	REG	0.0137	0.33	0.312	0.083	J	0.00116	J	3,220	1,190
MW057SA	10/9/2019	REG	0.0118	0.0408	0.0398	0.0797	J	0.0029		1,500	387
MW059	10/8/2019	FD	0.0137	0.587	0.524	0.1	U	0.002	U	3,400	885
MW059	10/8/2019	REG	0.0136	0.568	0.523	0.1	U	0.002	U	3,530	640
MW060	10/9/2019	REG	0.00492	0.004	0.01	1.86		6.47		3,480	1,490
MW061	10/9/2019	REG	0.012	1.2	1.15	0.1	U	0.0603		4,300	1,040
MW062A	10/8/2019	REG	0.0242	0.00187	0.01	0.1	U	0.002	U	489	60.8
MW063A	10/8/2019	REG	0.0249	0.00168	0.01	0.1	U	0.000251	J	484	54.4
MW066SA	10/8/2019	REG	0.0108	0.00565	0.0061	0.1	U	0.00819		1,860	510
MW068	10/9/2019	REG	0.017	0.004	0.01	0.362		2.01		15,500	8,880
MW069	10/9/2019	REG	0.00906	0.004	0.01	0.1	J	0.293		14,200	9,140
MW070	10/8/2019	REG	0.0138	0.004	0.01	0.1	U	0.002	U	1,220	398
MW071SA	10/8/2019	FD	0.00879	0.0011	0.01	0.0251	J	0.284		1,580	707
MW071SA	10/8/2019	REG	0.00874	0.000795	0.01	0.1	U	0.273		1,580	587
MW072SA	10/9/2019	REG	0.0189	0.004	0.01	0.1	U	0.00204		1,050	282
MW073SA	10/9/2019	REG	0.0119	0.004	0.01	0.1	U	0.0104		4,320	2,100
MW074SA	10/8/2019	REG	0.0153	0.0058	0.0061	0.1	U	0.002	U	1,640	363
MW075SA	10/8/2019	FD	0.0144	0.0117	0.01	0.1	U	0.002	U	1,850	495
MW075SA	10/8/2019	REG	0.0146	0.0116	0.0113	0.1	U	0.002	U	1,830	422
MW076SA	10/8/2019	REG	0.0126	0.00657	0.0074	0.0567	J	0.000831	J	1,890	398
MW079SA	10/9/2019	REG	0.00843	0.004	0.01	0.0585	J	0.0218		1,100	271
MW084SA	10/8/2019	REG	0.00979	0.0208	0.0204	0.1	U	0.00474		2,860	791
MW085SA	10/8/2019	REG	0.0128	0.0497	0.0318	0.102		0.0167		3,890	1,210
MW086SA	10/8/2019	REG	0.0123	0.0762	0.067	0.1	U	0.00833		3,240	1,110
MW088M	10/10/2019	REG	0.0178	0.135	0.01	1.98		1.4	J	3,620	980
MW089SA	10/11/2019	REG	0.0103	1.12	1.15	0.1	U	0.000543	J	3,770	929
MW093SA	10/10/2019	FD	0.0092	0.563	0.528	0.0313	J	0.119	J	3,390	885
MW093SA	10/10/2019	REG	0.0092	0.547	0.518	0.0382	J	0.121	J	3,500	18.2
MW095	10/9/2019	FD	0.00914	3.58	3.11	0.1	U	0.141		3,740	1,260
MW095	10/9/2019	REG	0.00909	3.29	3.02	0.1	U	0.142		3,440	1,280
MW099	10/9/2019	REG	0.01	0.004	0.01	0.0626	J	0.195		486	67.1
MW100	10/8/2019	REG	0.00952	0.000802	0.01	0.0928	J	0.27		2,210	899

Acronyms and Abbreviations:

bold = detected analytes
FD = field duplicate sample
ID = identification
mg/L = milligrams per liter

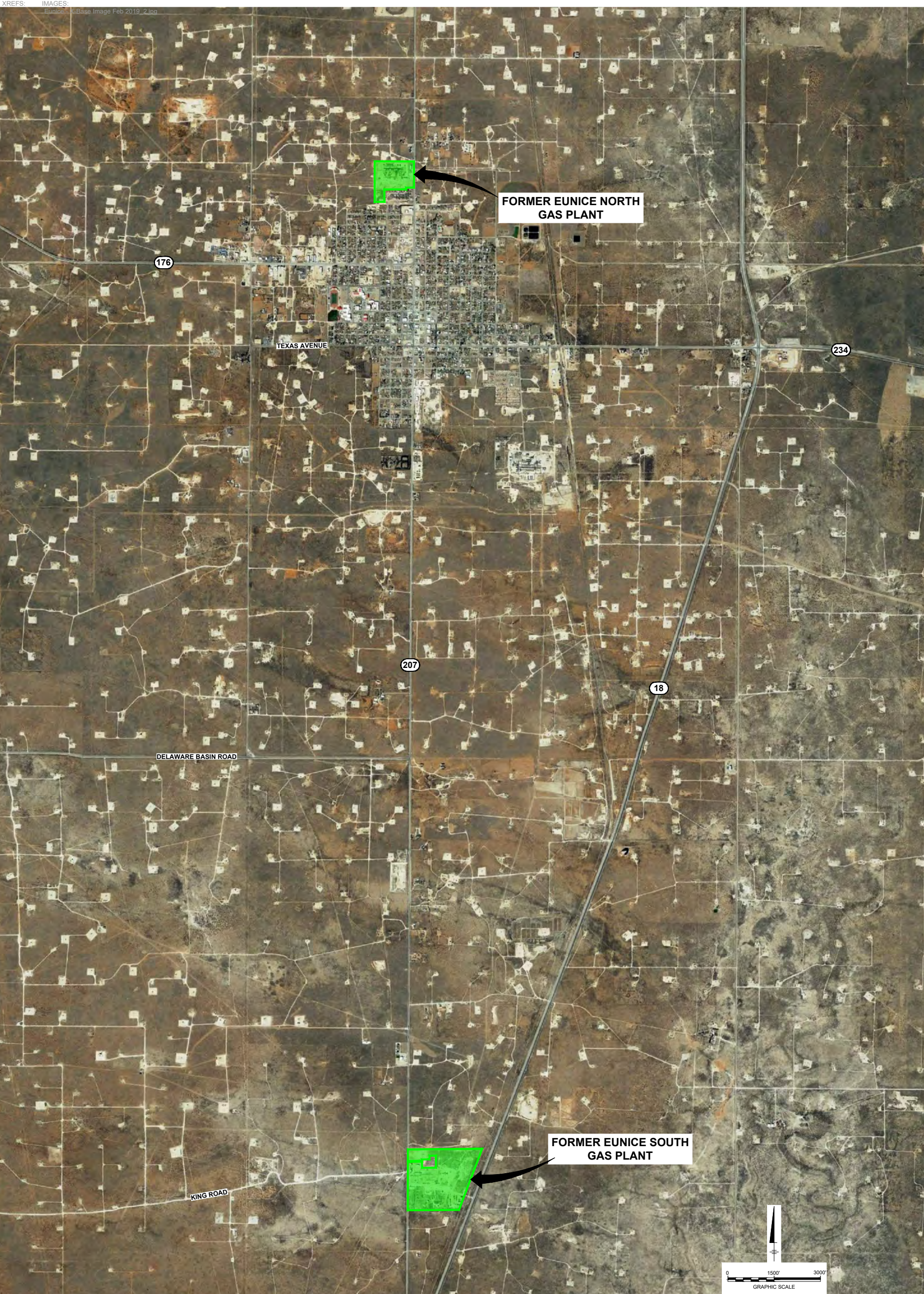
NMWQCC = New Mexico Water Quality Control Commission
REG = regular field sample
TDS = total dissolved solids
shading = analytes exceeding the NMWQCC Standard

Qualifiers:
J = estimated value
U = nondetect

FIGURES



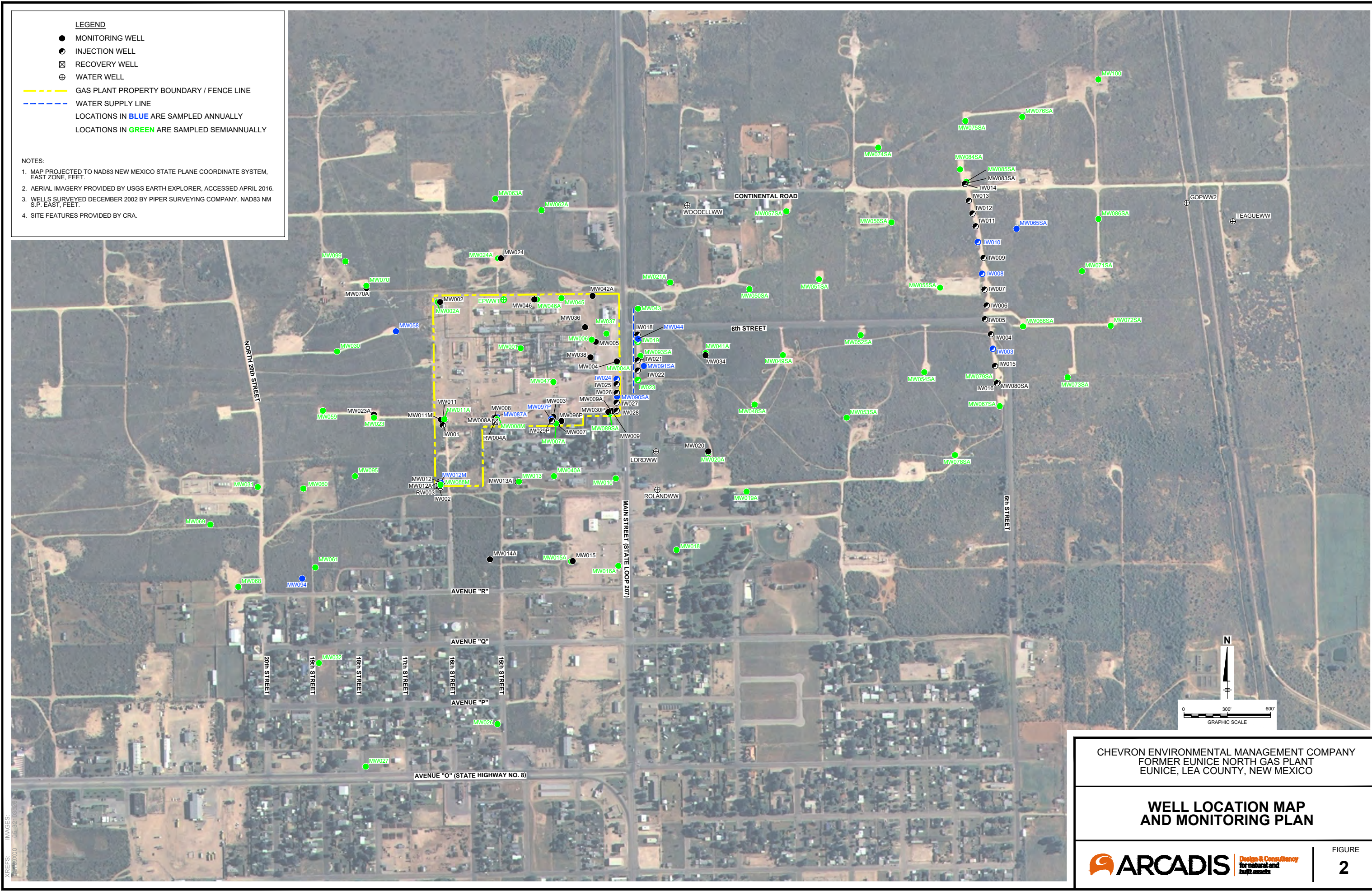
DIV/GROUP: ENVCAD
C:\Users\nadigerc8191\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2019\30006114 0003\01-DWG\Figure 1 - SLM2.dwg LAYOUT: 1 SAVED: 2/14/2020 1:29 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB
PLOTTED: 2/14/2020 1:35 PM BY: NADIGERA, CHIDAMBARA



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
FORMER EUNICE NORTH GAS PLANT
EUNICE, LEA COUNTY, NEW MEXICO

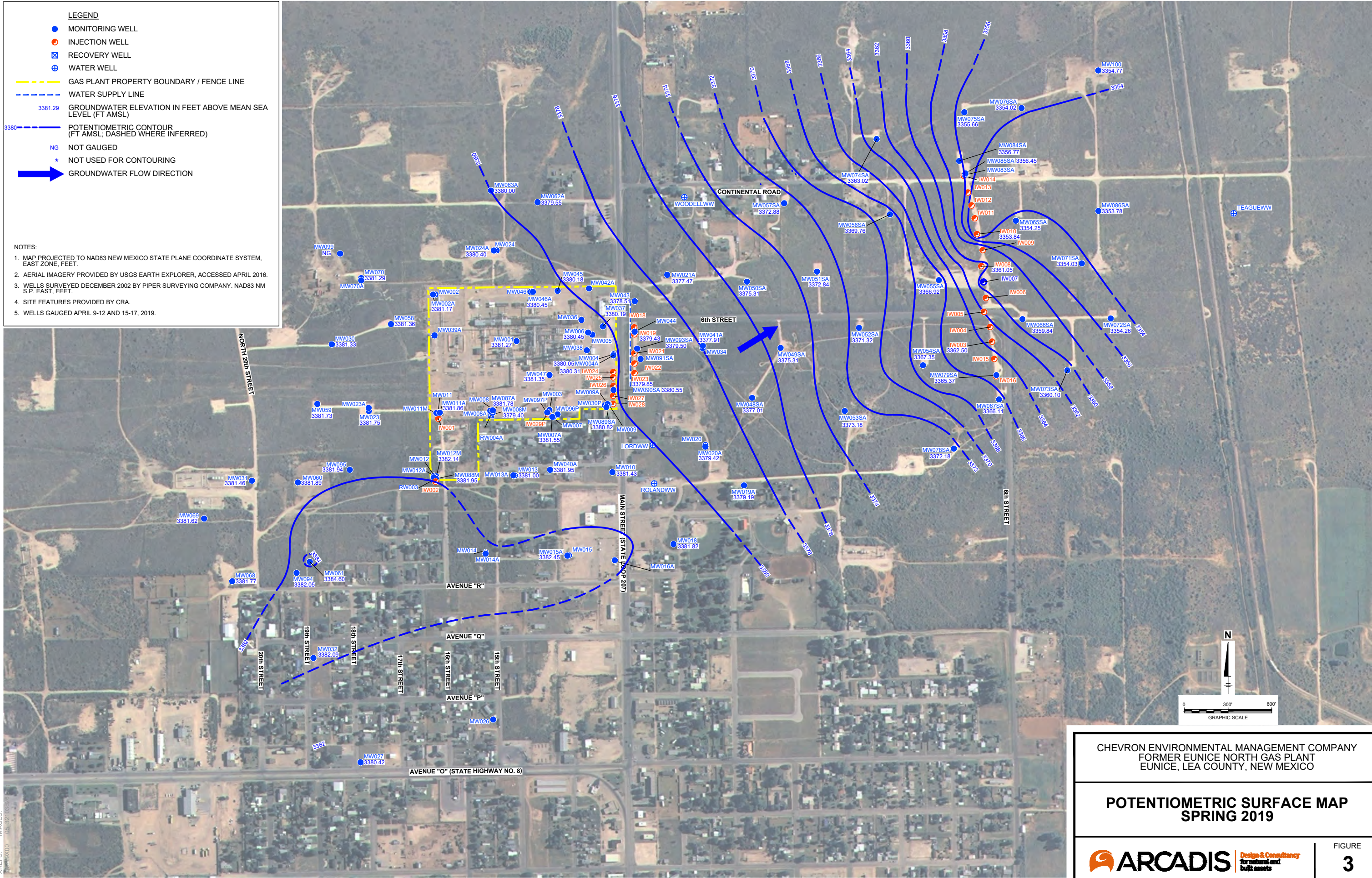
SITE LOCATION MAP

DIV/GRP: EN/CAD
C:\Users\paul010411\OneDrive\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant\Site O&M\2020\300061140\DWG\Figure 2 Site Map.dwg LAYOUT: 2
2:14 PM BY: ANJANEYAKUMAR, PAVAN KUMAR
XREFS: IMAGES: 05-32103020.dwg
SAVED: 2/14/2020 1:29 PM ACADVER: 23.1S (LMS TECH) PAGES: 23 PLOTSETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/6/2020

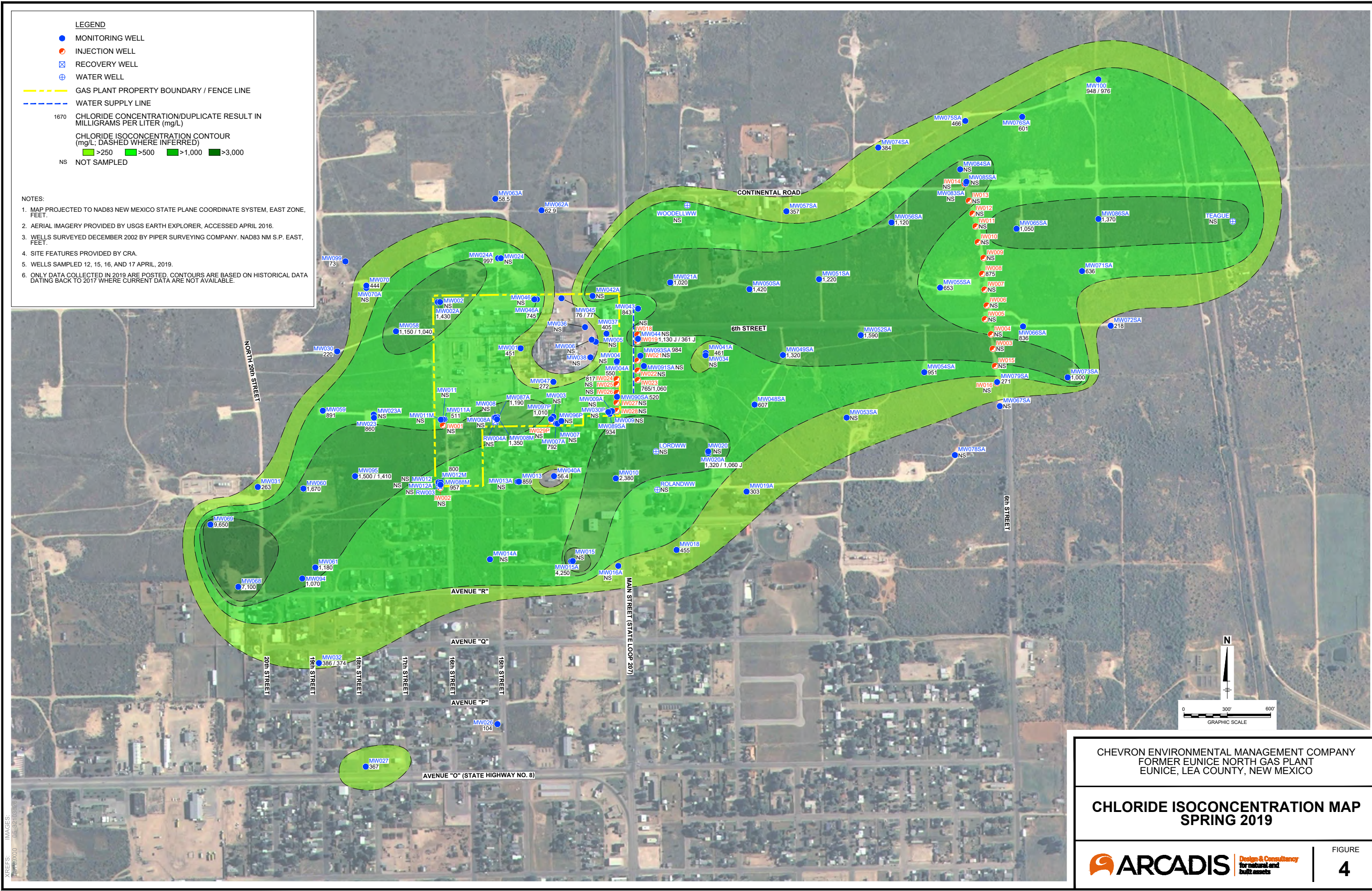


DIV/GRP: EN/CAD
C:\Users\paul010411\OneDrive\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant\Site O&M\2020\300061140\DWG\Figure 2 Site Map.dwg LAYOUT: 2
2:14 PM BY: ANJANEYAKUMAR, PAVAN KUMAR
XREFS: IMAGES: 05-32103020.dwg
SAVED: 2/14/2020 1:29 PM ACADVER: 23.1S (LMS TECH) PAGES: 23 PLOTSETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/6/2020

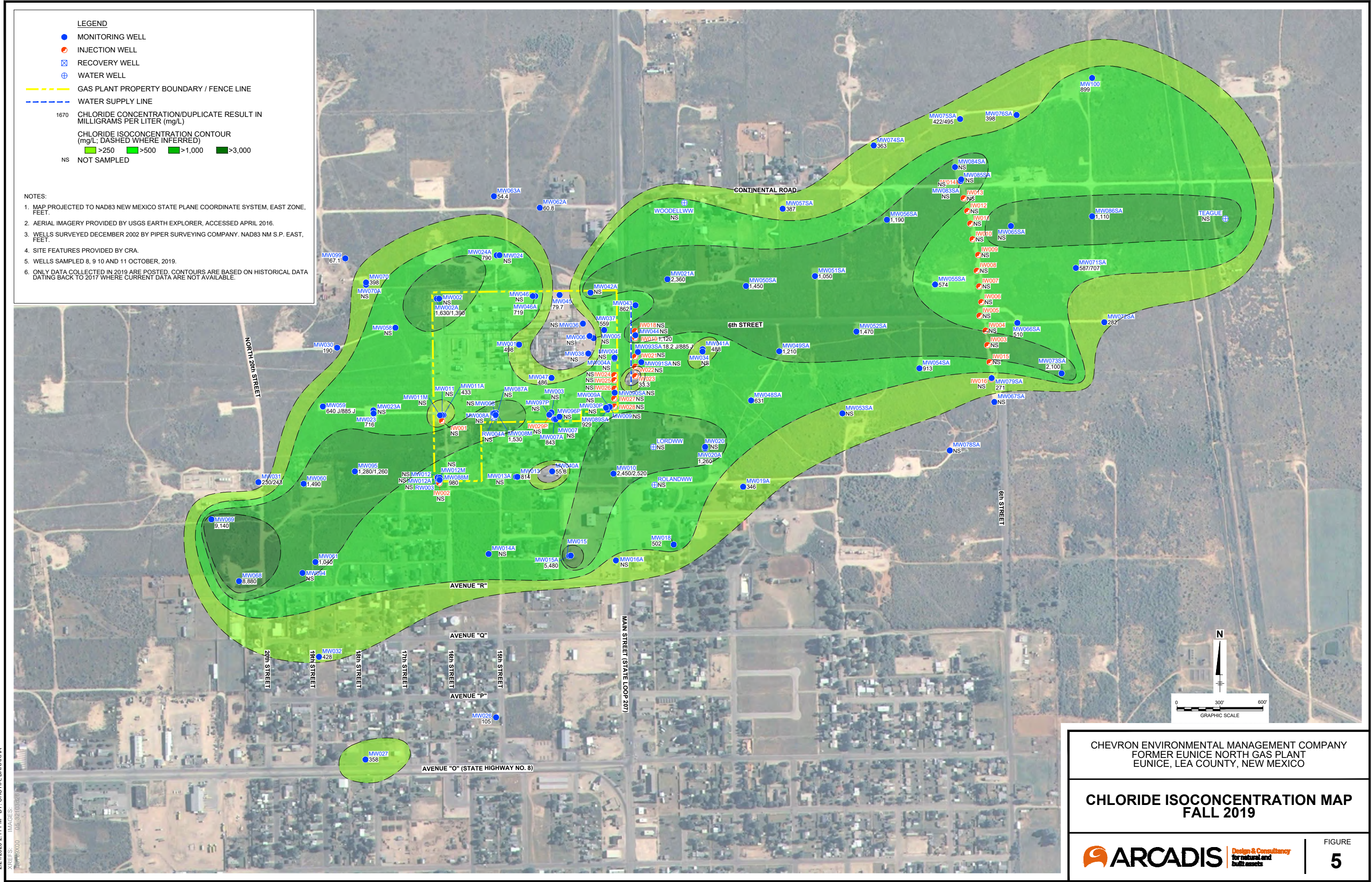
CITY: SAN RAFAEL, CA DIV/GROUP: ENV/CAD DB: J. HARRIS
C:\Users\paul01041\OneDrive\Documents\Projects\North Gas Plant\Site O&M\2020\300061140\1-DWG\Figure 3 - Potentiometric Surface Map Spring 2019.dwg LAYOUT: 3 SAVED: 2/21/2020 1:51 PM ACADVER: 23.1S (LMS TECH) PAGES: 48 OF 1146 PLOTSTYLETABLE: PLOT3D.ctb
PLOT: 3/6/2020 2:19 PM BY: ANANEYAKUMAR, PAVAN KUMAR



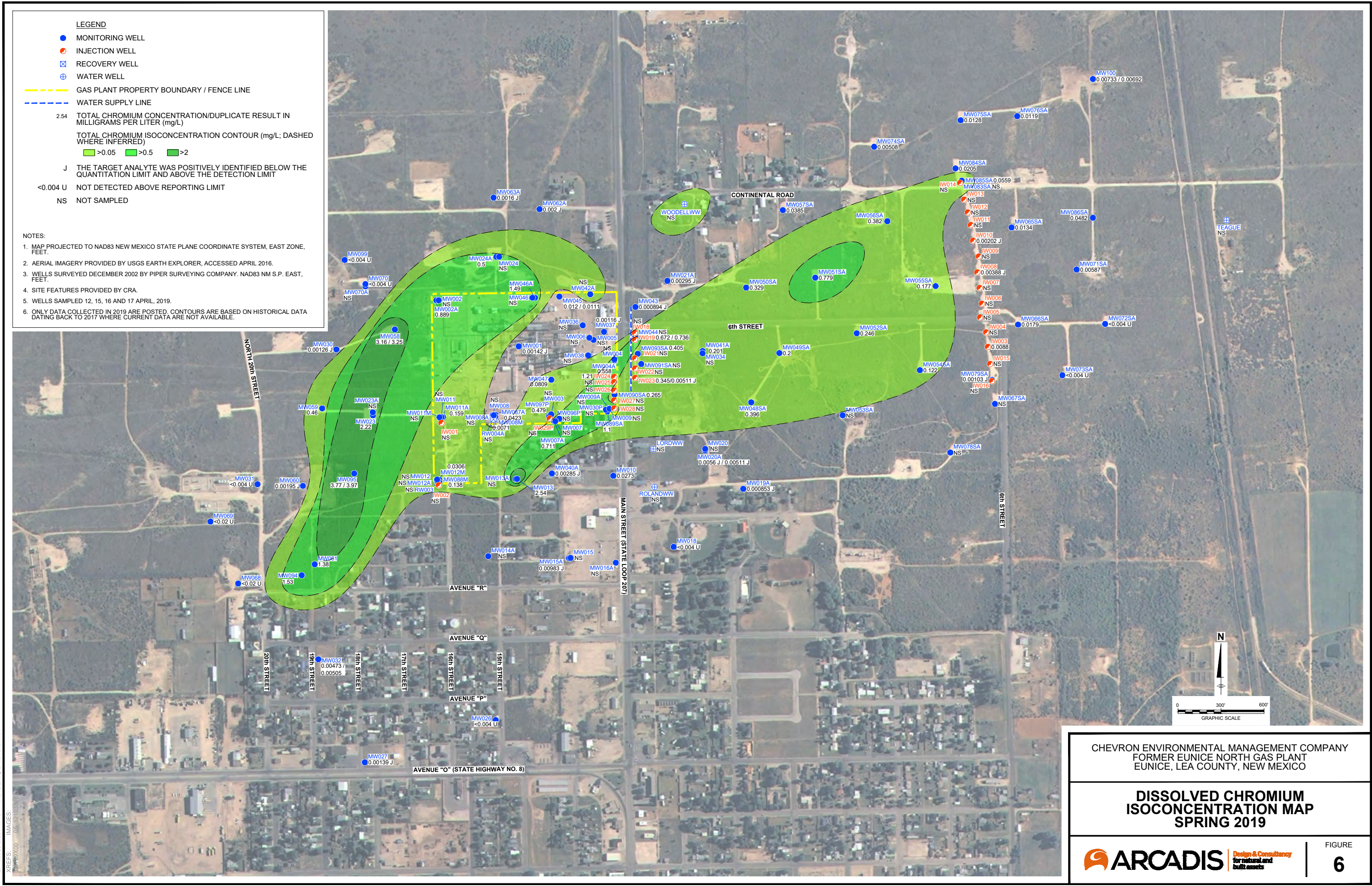
DIV/GRP: ENV/CD
C:\Users\ladier819\BIM_360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant\Site O&M\2020\30006114\01-DWG\EN Fig 4 CUM Spring 2019.dwg LAYOUT: 4. SAVED: 2/14/2020 10:41 AM ACADVER: 23.1S (LMS TECH) PAGES: 49 OF 1146 PLOTTED: 2/14/2020 10:42 AM BY: NADIGERA, CHIDAMBARA



DIV/GRP: ENV/CD
C:\Users\chulab467\OneDrive\Documents\CH2M HILL\Projects\North Gas Plant\Site O&M\2020\3000611401+DWG\EN Fig 5 CIM Fall 2019.dwg LAYOUT: 5 SAVED: 2/21/2020 2:03 PM ACADVER: 23.1S (LMS TECH) PAGES: 50 OF 1146 PLOTTED: 2/21/2020 2:11 PM BY: CHUTIA BARAKHA

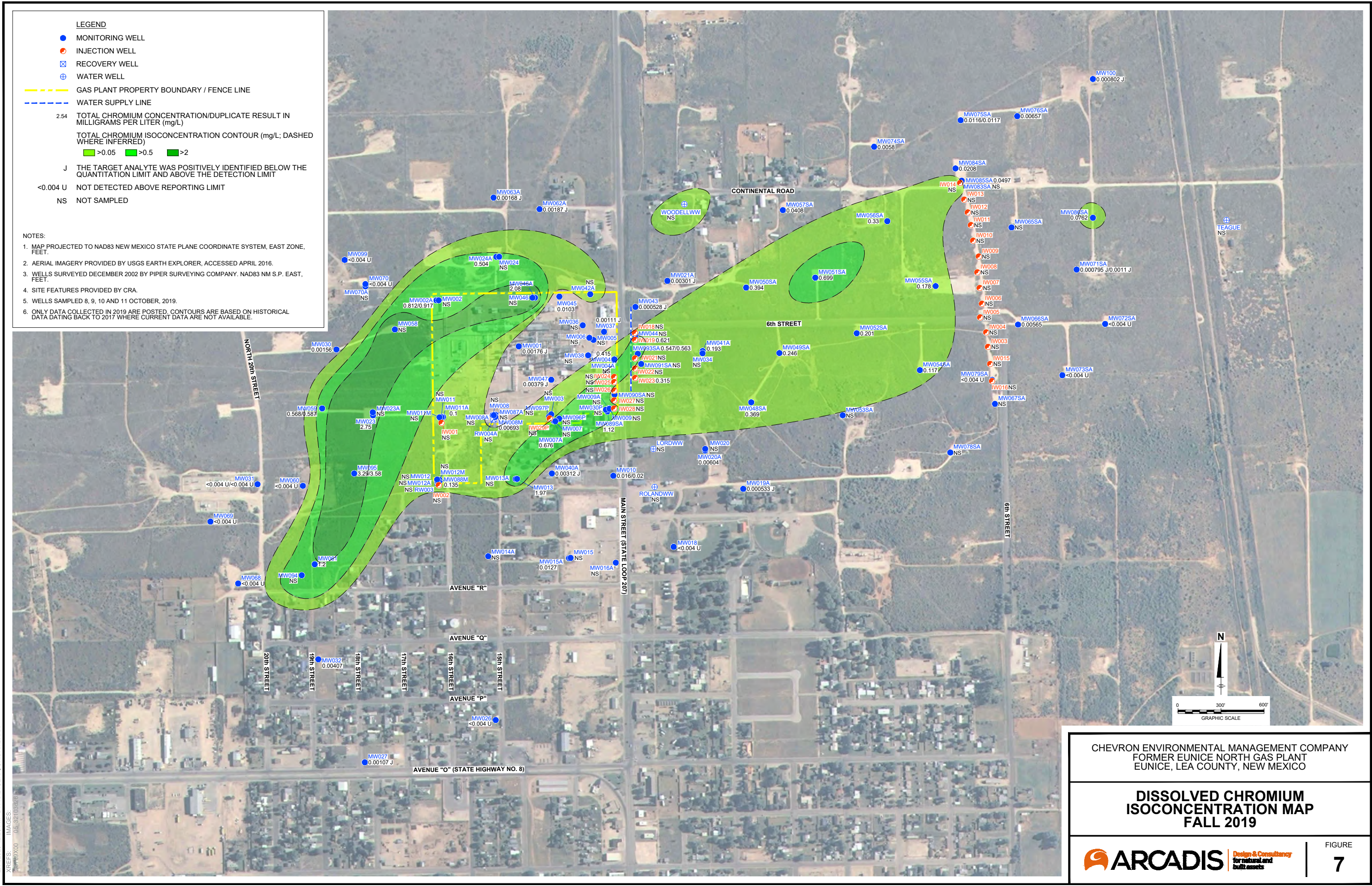


DIV/GRP: ENV/CD C:\Users\nadigera\OneDrive\Files\Environ\North Gas Plant\Site O&M\2020\30006114\01-DWG\EN Fig 6 DCIM Spring 2019.dwg LAYOUT: 6 SAVED: 2/14/2020 1:31 PM ACADVER: 23.1S (LMS TECH) PAGES: 6 PLOTSTYLE: TABLE: PLOTTED: 2/17/2020 3:38 PM BY: NADIGERA, CHIDAMBARA



DIV/GRP: ENV/CD
C:\Users\nadigera\OneDrive\Files\Environ\North Gas Plant\Site O&M\2020\30006114\01-DWG\EN Fig 6 DCIM Spring 2019.dwg
LAYOUT: 6 SAVED: 2/14/2020 1:31 PM ACADVER: 23.1S (LMS TECH) PAGES: 6 PLOTSTYLE: TABLE: PLOTTED: 2/17/2020 3:38 PM BY: NADIGERA, CHIDAMBARA

DIV/GRP: ENV/CD
C:\Users\ladigera\OneDrive\Files\Environ\North Gas Plant\Site\O&M\2020\30006114\01-DWG\EN Fig 7 DCIM Fall 2019.dwg LAYOUT: 7 SAVED: 2/14/2020 12:19 PM ACADVER: 23.15 (LMS TECH) PAGES: 52 OF 1146 PLOTTED: 2/14/2020 12:23 PM BY: NADIGERA, CHIDAMBARA



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
FORMER EUNICE NORTH GAS PLANT
EUNICE, LEA COUNTY, NEW MEXICO

**DISSOLVED CHROMIUM
ISOCONCENTRATION MAP
FALL 2019**



FIGURE
7

DIV/GRP: ENV/CAD
C:\Users\ladier819\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant\Site O&M\2020\3006114101-DWG\EN Fig 8 DHCM Spring 2019.dwg LAYOUT: 8
2/17/2020 3:39 PM BY: NADIGERA, CHIDAMBARA
XREFS: IMAGES: 00 321030301.dwg
SAVED: 2/14/2020 1:31 PM ACADVER: 23.1S (LMS TECH) PAGES: 23
PLOTSETUP: --- PLOTSTYLETABLE: --- PLOTTED:

LEGEND

●

 MONITORING WELL

●

 INJECTION WELL

⊠

 RECOVERY WELL

⊕

 WATER WELL

 GAS PLANT PROPERTY BOUNDARY / FENCE LINE

 WATER SUPPLY LINE

2.22

 HEXAVALENT CHROMIUM CONCENTRATION/DUPLICATE RESULT IN MILLIGRAMS PER LITER (mg/L)

HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOUR (mg/L; DASHED WHERE INFERRED)

>0.05

 >0.5 >2

J

 ESTIMATED VALUE

<0.01 U

 NOT DETECTED ABOVE REPORTING LIMIT

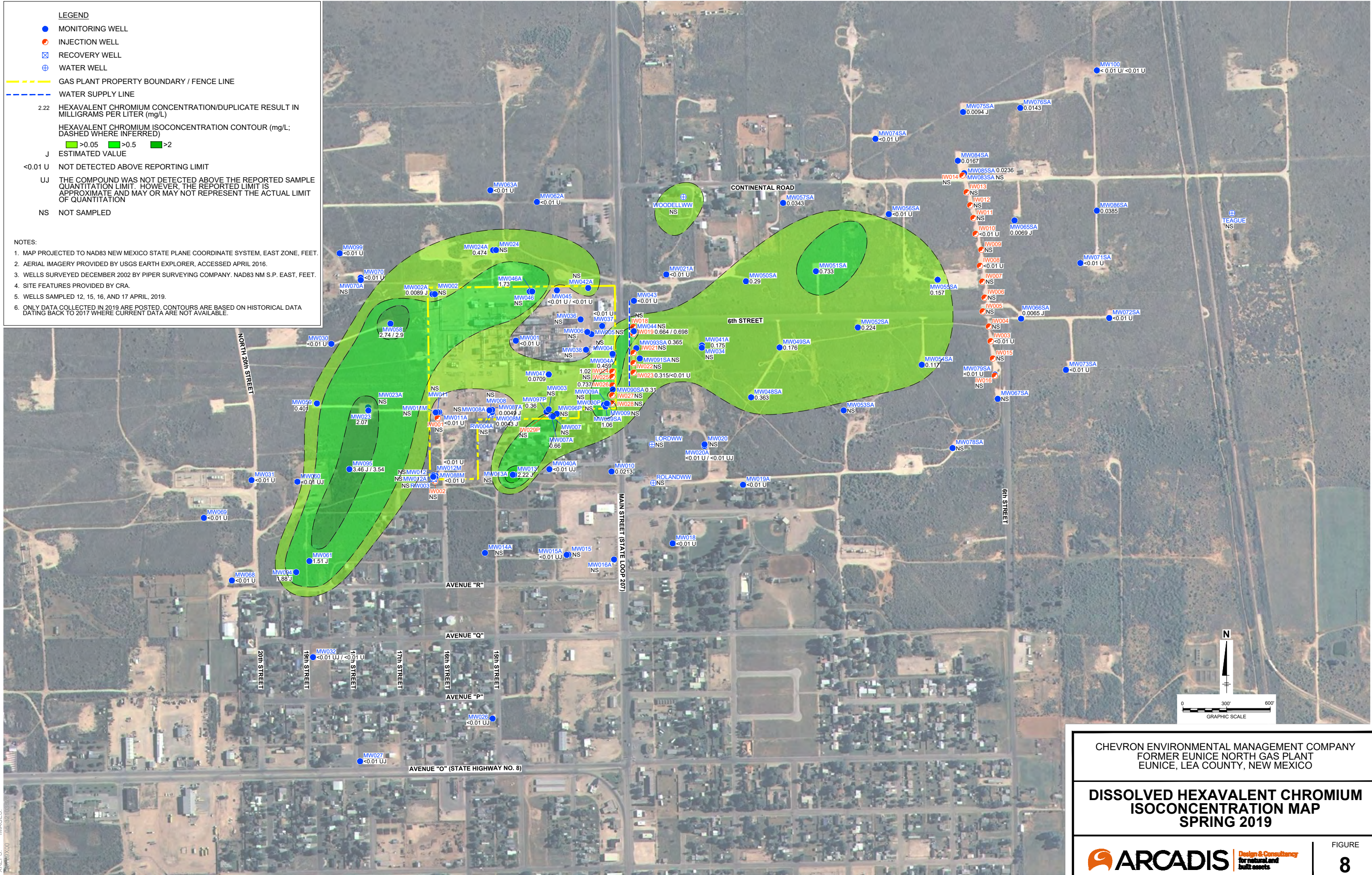
UJ

 THE COMPOUND WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT. HOWEVER, THE REPORTED LIMIT IS APPROXIMATE AND MAY OR MAY NOT REPRESENT THE ACTUAL LIMIT OF QUANTITATION

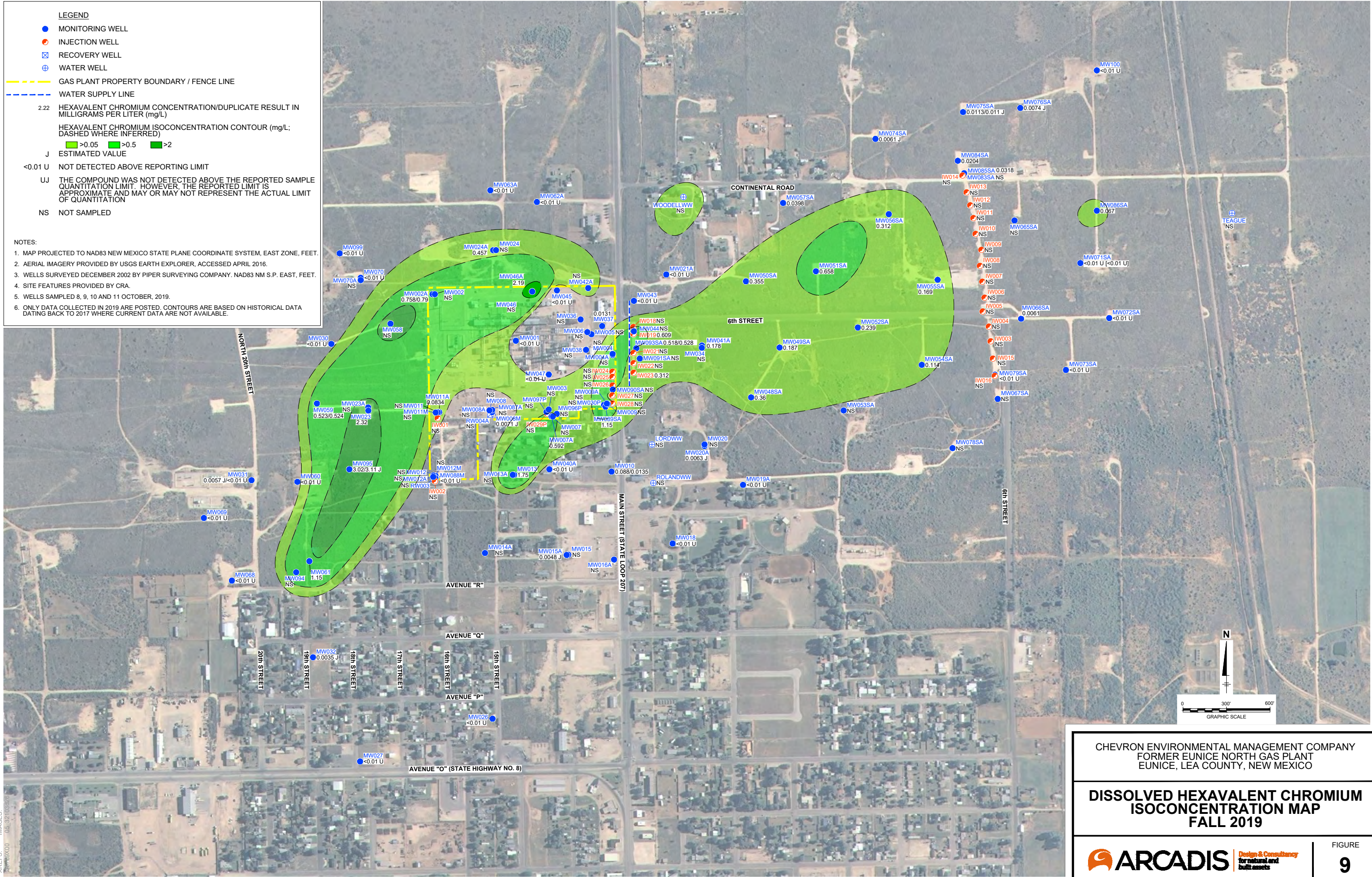
NS

 NOT SAMPLED

NOTES:
1. MAP PROJECTED TO NAD83 NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, FEET.
2. AERIAL IMAGERY PROVIDED BY USGS EARTH EXPLORER, ACCESSED APRIL 2016.
3. WELLS SURVEYED DECEMBER 2002 BY PIPER SURVEYING COMPANY. NAD83 NM S.P. EAST, FEET.
4. SITE FEATURES PROVIDED BY CRA.
5. WELLS SAMPLED 12, 15, 16, AND 17 APRIL, 2019.
6. ONLY DATA COLLECTED IN 2019 ARE POSTED. CONTOURS ARE BASED ON HISTORICAL DATA DATING BACK TO 2017 WHERE CURRENT DATA ARE NOT AVAILABLE.



DIV/GRP: ENV/CAD
C:\Users\chulab477\OneDrive\Documents\Projects\North Gas Plant\Site O&M\2020\3000611401+DWG\EN Fig 9 DHCIM Fall 2019.dwg LAYOUT: 9
2/21/2020 2:07 PM BY: CHUTIA BARAKHA
XREFS: IMAGES: 05_32103020.dwg
PAGES: 9
SAVED: 2/17/2020 3:40 PM
ACADVER: 23.1S (LMS TECH)
PAGESETUP: 9
PLOTSTYLETABLE: 9
PLOTTED:



APPENDIX A

Site Background Information



Appendix A – Site Background Information

SITE AND REGULATORY BACKGROUND INFORMATION

The Site was originally constructed in the 1940s by Skelly Oil Company and attained by Texaco Exploration and Production, Inc. It was operated as a turbo expander-type natural gas processing plant for the extraction of natural gas liquids until the 1980s when operations were halted. Various structures remain on site including compressors, a compressor building, a cooling tower, former office buildings, aboveground storage tanks, sumps, and piping. On July 1, 1998, operations were transferred to Versado Gas Processors, LLC, a limited liability partnership originally between Chevron and Dynegy Midstream Services (Dynegy). Dynegy was subsequently purchased by Targa, and Chevron divested its interest to Targa in 2016. The plant is currently owned and operated solely by Targa.

In April 1980, the New Mexico Energy and Minerals Department, Oil Conservation Division (NMOCD) requested a discharge plan to cover all effluent discharges at the Site. The original discharge plan (GW-004) was approved by the NMOCD in March 1981 for 5 years and has been continuously renewed every 5 years. The most recent application was approved by the NMOCD on January 11, 2012 (Attachment 1). CEMC submitted a renewal application to the NMOCD on November 11, 2015; however, approval has not yet been received.

Several investigations were conducted between 1996 and 2003 and identified four constituents of concern (COCs) on site: dissolved total and hexavalent chromium, dissolved petroleum hydrocarbons, and total dissolved solids (TDS) represented by chloride. Arsenic, iron, and manganese are also included in the groundwater monitoring requirements set forth by the discharge permit and have been analyzed since 2004.

SAMPLING METHODOLOGY

NMOCD provided approval of CEMC's request for modification of sampling parameters in October 2015, resulting in a subset of six wells sampled and analyzed for BTEX, GRO and DRO during each event.

Prior to 2016, groundwater sampling was completed using low-flow methodology. In April 2016, CEMC submitted a request to change the sample method to no-purge sampling using a HydraSleeve™ (HS). This change was approved by the NMOCD via email on March 25, 2016. Following the approved sampling methodology change, Arcadis submitted a 2017 Sampling and Analysis Plan (2017 SAP; Arcadis 2017) to the NMOCD on March 9, 2017.

Appendix A – Site Background Information

This page intentionally left blank.

ATTACHMENT 1



DISCHARGE PERMIT GW-004

1. GENERAL PROVISIONS:

A. PERMITTEE AND PERMITTED FACILITY: The Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department issues Discharge Permit GW-004 (Discharge Permit) to Chevron U.S.A., Inc. (Owner/Operator), located at 1400 Smith Street, Houston, Texas 77002 to abate ground water and vadose zone contamination at its Eunice North Gas Plant (Facility) located at State Highway 207 (Eunice-Hobbs Highway) Eunice, New Mexico 88231 in the NE/4 of the SE/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

As a result of historical operations at the site, Chevron is proposing to remediate chromium contaminated ground water by injecting 5 percent solution of sodium dithionite and/or a 10 percent soy lactate solution in injection wells to remediate contaminated ground water. Chevron will mix 2800 gallons fresh water with a five percent solution of sodium dithionite and/or mix 2800 gallons fresh water with ten percent soy lactate solution to generate a solution which will then be discharged into the Ogallala aquifer. The ground water will be sampled to determine the effectiveness of the discharged solution to remediate the chromium contamination. The depth to ground water in the Ogallala aquifer is 37 to 73 feet below the surface and the background total dissolved solids concentration is approximately 1,200 mg/L. The discharge plan specifies that Chevron will remediate contaminated ground at the site to meet the standards specified in the Water Quality Control Commission regulations (20.6.2.3103 NMAC).

B. SCOPE OF PERMIT: OCD has been granted authority to administer the Water Quality Act (Chapter 74, Article 6 NMSA 1978) as it applies to gas processing plants by statute and by delegation from the Water Quality Control Commission pursuant to Section 74-6-4(E) NMSA 1978.

The Water Quality Act and the rules issued under that Act protect ground water and surface water of the State of New Mexico by providing that, unless otherwise allowed by rule, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless such discharge is pursuant to an approved discharge plan. See 20.6.2.3104 NMAC and 20.6.2.3106 NMAC.

This Discharge Permit does not authorize any treatment of, or on-site disposal of, any materials, product, by-product, or oil field waste, including, but not limited to, the on-site disposal of lube oil, glycol, antifreeze, filters, elemental sulfur, washdown water, contaminated soil, and cooling tower blowdown water.

This Discharge Permit does not convey any property rights of any sort nor any exclusive privilege, and does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state, federal, or local laws, rules or regulations.

The Owner/Operator shall operate in accordance with the Discharge Permit conditions to comply with the Water Quality Act and the rules issued pursuant to that Act, so that neither a hazard to public health nor undue risk to property will result (see 20.6.2.3109C NMAC); so that no discharge will cause or may cause any stream standard to be violated (see 20.6.2.3109H(2) NMAC); so that no discharge of any water contaminant will result in a hazard to public health, (see 20.6.2.3109H(3) NMAC); and so that the numerical standards specified of 20.6.2.3103 NMAC are not exceeded.

The Owner/Operator shall not allow or cause water pollution, discharge, or release of any water contaminant that exceeds the Water Quality Control Commission (WQCC) standards specified at 20.6.2.3101 NMAC and 20.6.2.3103 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams).

C. DISCHARGE PERMIT CONDITIONS: By signing this Discharge Permit, the Owner/Operator agrees to the specific provisions set out in this document, and the commitments made in the approved Discharge Plan Application and the attachments to that application, which are incorporated into the Discharge Permit by reference.

If this Discharge Permit is a permit renewal, it replaces the permit being renewed. Replacement of a prior permit does not relieve the Owner/Operator of its responsibility to comply with the terms of that prior permit while that permit was in effect.

D. DEFINITIONS: Terms not specifically defined in this Discharge Permit shall have the same meanings as those in the Water Quality Act or the rules adopted pursuant to that Act, as the context requires.

E. FILING FEES AND PERMIT FEES: Pursuant to 20.6.2.3114 NMAC, every facility that submits a discharge permit application for initial approval or renewal shall pay the permit fees specified in Table 1 and the filing fee specified in Table 2 of 20.6.2.3114 NMAC. OCD has already received the required \$100.00 filing fee for this application. The flat fee for "Abatement of Ground Water and Vadose Zone Contamination at Oil and Gas Sites" is \$2,600.00. The Owner/Operator shall submit this amount along with the signed Discharge Permit. Checks should be payable to the "New Mexico Water Quality Management Fund," not the Oil Conservation Division.

F. EFFECTIVE DATE, EXPIRATION, RENEWAL CONDITIONS, AND PENALTIES FOR OPERATING WITHOUT A DISCHARGE PERMIT: This Discharge Permit is effective when the Division's Environmental Bureau receives the signed Discharge Permit from the Owner/Operator and the \$2,600.00 fee. This Discharge Permit will expire on March 16, 2016. The Owner/Operator shall submit an application for renewal no later than 120 calendar days before that expiration date, pursuant to 20.6.2.3106F NMAC. If an Owner/Operator submits a renewal application at least 120 calendar days before the Discharge Permit expires and is in compliance with the approved Discharge Permit, then the existing Discharge Permit will not expire until OCD has approved or disapproved the renewal application. Operating with an expired Discharge Permit may subject the Owner/Operator to

civil and/or criminal penalties. See Section 74-6-10.1 NMSA 1978 and Section 74-6-10.2 NMSA 1978.

G. MODIFICATIONS: The Owner/Operator shall notify the Division's Environmental Bureau of any facility expansion, production increase, or process modification that would result in any significant modification in the discharge of water contaminants. See 20.6.2.3107C NMAC. The Division's Environmental Bureau may require the Owner/Operator to submit a permit modification pursuant to 20.6.2.3109E NMAC and may modify or terminate a permit pursuant to Section 74-6-5(M) through (N) NMSA 1978.

H. TRANSFER OF DISCHARGE PERMIT: Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of the Facility, the transferor shall notify the transferee in writing of the existence of the Discharge Permit, and shall deliver or send by certified mail to the Division's Environmental Bureau a copy of such written notification, together with a certification or other proof that such notification has been received by the transferee pursuant to 20.6.2.3111 NMAC. Upon receipt of such notification, the transferee shall inquire into all of the provisions and requirements contained in the Discharge Permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the Division's file or files concerning the Discharge Permit. Upon assuming either ownership or possession of the Facility the transferee shall have the same rights and responsibilities under the Discharge Permit as were applicable to the transferor. See 20.6.2.3111 NMAC.

Transfer of the ownership, control, or possession of the Facility does not relieve the transferor of responsibility or liability for any act or omission which occurred while the transferor owned, controlled, or was in possession of the Facility. See 20.6.2.3111E NMAC.

I. CLOSURE PLAN AND FINANCIAL ASSURANCE: The Owner/Operator shall notify the Division's Environmental Bureau in writing when any operations of its Facility are to be discontinued for a period in excess of six months. Upon review of the Owner/Operator's notice, the Division's Environmental Bureau will determine whether to modify this permit pursuant to 20.6.2.3107 NMAC and 20.6.2.3109E NMAC or to require the Owner/Operator to submit a closure plan and/or post-closure plan, including financial assurance.

J. COMPLIANCE AND ENFORCEMENT: If the Owner/Operator violates or is violating a condition of this Discharge Permit, the Division's Environmental Bureau may issue a compliance order requiring compliance immediately or within a specified time period, suspending or terminating this Discharge Permit, and/or assessing a civil penalty. See Section 74-6-10 NMSA 1978. The Division's Environmental Bureau may also commence a civil action in district court for appropriate relief, including injunctive relief. See Section 74-6-10(A)(2) NMSA 1978 and Section 74-6-11 NMSA 1978. The Owner/Operator may be subject to criminal penalties for discharging a water contaminant without a discharge permit or in violation of a condition of a discharge permit; making any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the Water Quality Act; falsifying, tampering with

or rendering inaccurate any monitoring device, method or record required to be maintained under the Water Quality Act; or failing to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation. See Section 74-6-10.2 NMSA 1978.

2. GENERAL FACILITY OPERATIONS:

A. OPERATIONAL MONITORING: The Owner/Operator shall comply with its approved monitoring programs pursuant 20.6.2.3107 NMAC.

1. Ground Water Monitoring System: The Owner/Operator shall monitor and sample all ground water monitor wells in accordance with its approved ground water abatement program, including the monitor wells for the hydrocarbon plume, the chloride plume, and the chromium plume.

2. Installation of Monitor Wells Near Injection Wells IW023 and IW024:

a. The Owner/Operator shall install three monitor wells near Injection Well IW023 and three monitor wells near Injection Well IW024 in accordance with its renewal application of December 6, 2010.

b. The Owner/Operator shall monitor the near monitor wells to determine whether it has achieved its primary objectives as specified in its renewal application of December 6, 2010.

3. Dithionite Injection Pilot Study Monitoring

a. Field Monitoring: During the injection, the Owner/Operator shall monitor the three monitoring wells hourly for pH, DO, ORP, conductivity, and temperature.

b. Post-Injection Monitoring and Sampling: The Owner/Operator shall sample the three monitor wells and IW023 monthly for 3 months after the injection, using the injection and monitoring wells, to evaluate the effectiveness of the sodium dithionite treatment. Ground water samples will be collected and analyzed for total and hexavalent chromium, bromide, sulfate, sulfide, total organic carbon, sodium, total and dissolved iron, and field parameters (pH, temperature, conductivity, DO and ORP).

4. Biodegradation Pilot Study

a. Baseline Sampling: Prior to the injection of a soy-lactate solution, the Owner/Operator shall sample and analyze IW023 and the three monitoring wells for total and hexavalent chromium, sulfate, sulfide, ammonia-nitrogen, orthophosphate-phosphorus, total anaerobic microbial counts, total organic carbon, total and dissolved iron, and field parameters (pH, temperature, conductivity, DO, and ORP).

b. Field Monitoring: During the injection, the Owner/Operator shall monitor the three monitor wells hourly for pH, DO, ORP, conductivity, and temperature.

c. **Post -Injection Monitoring and Sampling:** The Owner/Operator shall sample the IW024 and the three monitoring wells to evaluate the treatment effectiveness. Ground water samples will be collected for successive quarters after the injection event and analyzed for total and hexavalent chromium, sulfate, sulfide, ammonia -nitrogen, orthophosphate - phosphorus, total anaerobic microbial counts, total organic carbon, total and dissolved iron, and field parameters (pH, temperature, conductivity, DO, and ORP).

B. CONTINGENCY PLANS: The Owner/Operator shall implement its approved Contingency Plans to cope with failure of the discharge permit or system in accordance with Permit Condition 2.F.

C. CLOSURE PLAN: After completing abatement of all ground water and vadose contamination required under Permit Condition 2.G, the Owner/Operator shall perform the following closure measures:

1. Remove or plug all lines leading to and from ground water recovery or injection wells so that a discharge can no longer occur.
2. Remove all abatement system components from the site, if applicable.
3. After receiving notification from the Division's Environmental Bureau that post-closure monitoring may cease, the Owner/Operator shall plug and abandon its monitor well(s).

D. RECORD KEEPING: The Owner/Operator shall maintain records of all inspections required by this Discharge Permit at its local office located at 240 Avenue O, Eunice, NM 88231 for a minimum of five years and shall make those records available for inspection by the Division's Environmental Bureau.

E. RELEASE REPORTING: The Owner/Operator shall comply with the following permit conditions, pursuant to 20.6.2.1203 NMAC, if it determines that a release of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, has occurred. The Owner/Operator shall report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan. If the Owner/Operator determines that any constituent exceeds the standards specified at 20.6.2.3103 NMAC, then it shall report a release to the Division's Environmental Bureau.

- 1. Oral Notification:** As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, the Owner/Operator shall orally notify the Division's Environmental Bureau. The Owner/Operator shall provide the following:
 - the name, address, and telephone number of the person or persons in charge of the facility, as well as of the Owner/Operator of the facility;
 - the name and location of the facility;

- the date, time, location, and duration of the discharge;
- the source and cause of discharge;
- a description of the discharge, including its chemical composition;
- the estimated volume of the discharge; and,
- any actions taken to mitigate immediate damage from the discharge.

2. Written Notification: Within one week after the Owner/Operator has learned of the discharge, the Owner/Operator shall send written notification to the Division's Environmental Bureau verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

F. ABATEMENT PLAN: Pursuant to 20.6.2.4105A(6) NMAC, an Owner/Operator is exempt from the requirement to obtain and implement an Abatement Plan, as required in 20.6.2.4104 NMAC. However, an Owner/Operator's Discharge Permit must address abatement of contaminated ground water and be consistent with the requirements and provisions of Sections 20.6.2.4101, 20.6.2.4103, Subsections C and E of Section 20.6.2.4106, Sections 20.6.2.4107 and 20.6.2.4112 NMAC.

1. Purpose of Abatement Plan: The Owner/Operator shall abate polluted ground water so as to either remediate or protect the ground water for use as domestic and agricultural water supply.

2. Abatement Standards and Requirements: The Owner/Operator shall abate the vadose zone so that water contaminants in the vadose zone shall not contaminate ground water or surface water, through leaching, percolation or as the water table elevation fluctuates. The Owner/Operator, where the Total Dissolved Solids concentration is 10,000 mg/L or less, shall abate contaminated ground water so that toxic pollutant(s), as defined in 20.6.2.7WW NMAC, shall not be present and so that the standards of 20.6.2.3103 NMAC shall be met.

3. Ground Water Abatement: The Owner/Operator shall implement its approved ground water abatement program until it has remediated the contaminated ground water to meet the standards and requirements set forth in 20.6.2.4103 NMAC.

4. Completion and Termination: Pursuant to 20.6.2.4112 NMAC, abatement shall be considered complete when the standards and requirements specified in 20.6.2.4103 NMAC are met. At that time, the Owner/Operator shall submit an abatement completion report, documenting compliance with the standards and requirements set forth in 20.6.2.4103 NMAC and this Discharge Permit, to Division's Environmental Bureau for approval. The abatement completion report also shall propose any changes to long term monitoring and site maintenance activities, if needed, to be performed after termination of the abatement plan.

G. OTHER REQUIREMENTS:

1. Inspection and Entry: Pursuant to 20.6.2.4107A NMAC, the Owner/Operator shall allow the Division's Environmental Bureau, upon the presentation of proper credentials, to:

- enter the facility at reasonable times;
- inspect and copy records required by this discharge permit;
- inspect any treatment works, monitoring, and analytical equipment;
- sample any wastes, ground water, surface water, stream sediment, plants, animals, or vadose-zone material including vadose-zone vapor;
- use the Owner/Operator's monitoring systems and wells in order to collect samples; and
- gain access to off-site property not owned or controlled by the Owner/Operator, but accessible to the Owner/Operator through a third-party access agreement, provided that it is allowed by the agreement.

2. Advance Notice: Pursuant to 20.6.2.4107B NMAC, The Owner/Operator shall provide the Division's Environmental Bureau with at least four (4) working days advance notice of any sampling to be performed pursuant to this Discharge Permit, or any well plugging, abandonment or destruction at the facility site.

3. Plugging and Abandonment: Pursuant to 20.6.2.4107C NMAC, the Owner/Operator shall request by certified mail, approval by the Division's Environmental Bureau to plug and abandon a monitor well, unless such approval is required from the State Engineer. The proposed action shall be designed to prevent water pollution that could result from water contaminants migrating through the well or borehole. The proposed action shall not take place without written approval from the Division's Environmental Bureau, unless written approval or disapproval is not received by the Owner/Operator within thirty (30) days of the date of receipt of the proposal.

H. ANNUAL REPORT: The Owner/Operator shall submit its annual report for each calendar year pursuant to 20.6.2.3107 NMAC to the Division's Environmental Bureau by March 15th of the following year. The annual report shall include the following:

1. Results of its ground water monitoring program; including:
 - summary tables listing laboratory analytic results of all ground water and soil samples. Any WQCC constituent found to exceed the groundwater standard shall be highlighted and noted in the annual report. Copies of the most recent year's laboratory analytical data sheets shall also be submitted.
 - annual water table potentiometric maps. A corrected water table elevation shall be determined for all wells containing non-aqueous phase liquids. These maps shall show well locations, pertinent site features, and the direction and magnitude of the hydraulic gradient.
 - semi-annual isopleth maps for the following constituents: non-aqueous phase liquids; chlorides; chromium; and, BTEX.

- semi-annual geologic cross-sections (both dip and strike), using the geologic/lithologic logs from the monitor, recovery, and injection wells, depicting the concentrations for the following constituents: non-aqueous phase liquids; chlorides; chromium; and, BTEX.
 - estimate or measure of the volume of the solutions discharged during each quarter and the total volume discharged to date.
2. Summary of any releases and corrective actions taken in accordance with its approved Contingency Plan.

3. **CLASS V WELLS:** Pursuant to 20.6.2.5002B NMAC, leach fields and other wastewater disposal systems at Division-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are UIC Class V injection wells, including ground water management wells. This Discharge Permit does not authorize the use of a Class V injection well for the disposal of industrial waste at the Facility. Pursuant to 20.6.2.5005 NMAC, the Owner/Operator shall close any Class V industrial waste injection wells at its Facility that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes (*e.g.*, septic systems, leach fields, dry wells, *etc.*) other than the injection remediation wells within 90 calendar days of the issuance of this Discharge Permit. The Owner/Operator shall document the closure of any Class V wells used for the disposal of non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes other than contaminated ground water in its Annual Report.

Other Class V wells, including wells used only for the injection of domestic wastes, must be permitted by the New Mexico Environment Department.

4. **SCHEDULE OF COMPLIANCE:**

A. **PERMIT CERTIFICATION:** The Owner/Operator shall sign and return this Permit to the Division's Environmental Bureau within 45 days of its receipt of this Permit.

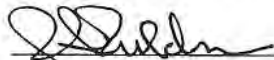
B. **SUBMISSION OF THE PERMIT FEES:** As specified in Permit Condition 1.F, the Owner/Operator shall submit the fee of \$2,600.00 along with the signed Discharge Permit within 45 days of the receipt of the Discharge Permit. Checks should be payable to the "New Mexico Water Quality Management Fund," not the Oil Conservation Division.

C. **ANNUAL REPORT:** As specified in Permit Condition 2.H, the Owner/Operator shall submit its annual report to the Division's Environmental Bureau by March 15th of the following year.

5. **CERTIFICATION: (OWNER/OPERATOR)** by the officer whose signature appears below, acknowledges receipt of this Discharge Permit, and has reviewed its terms and conditions.

Chevron U.S.A. Inc
Company Name - print name

Robert A. Guldner
Company Representative - print name


Company Representative - Signature

Title: Manager OE/WBS

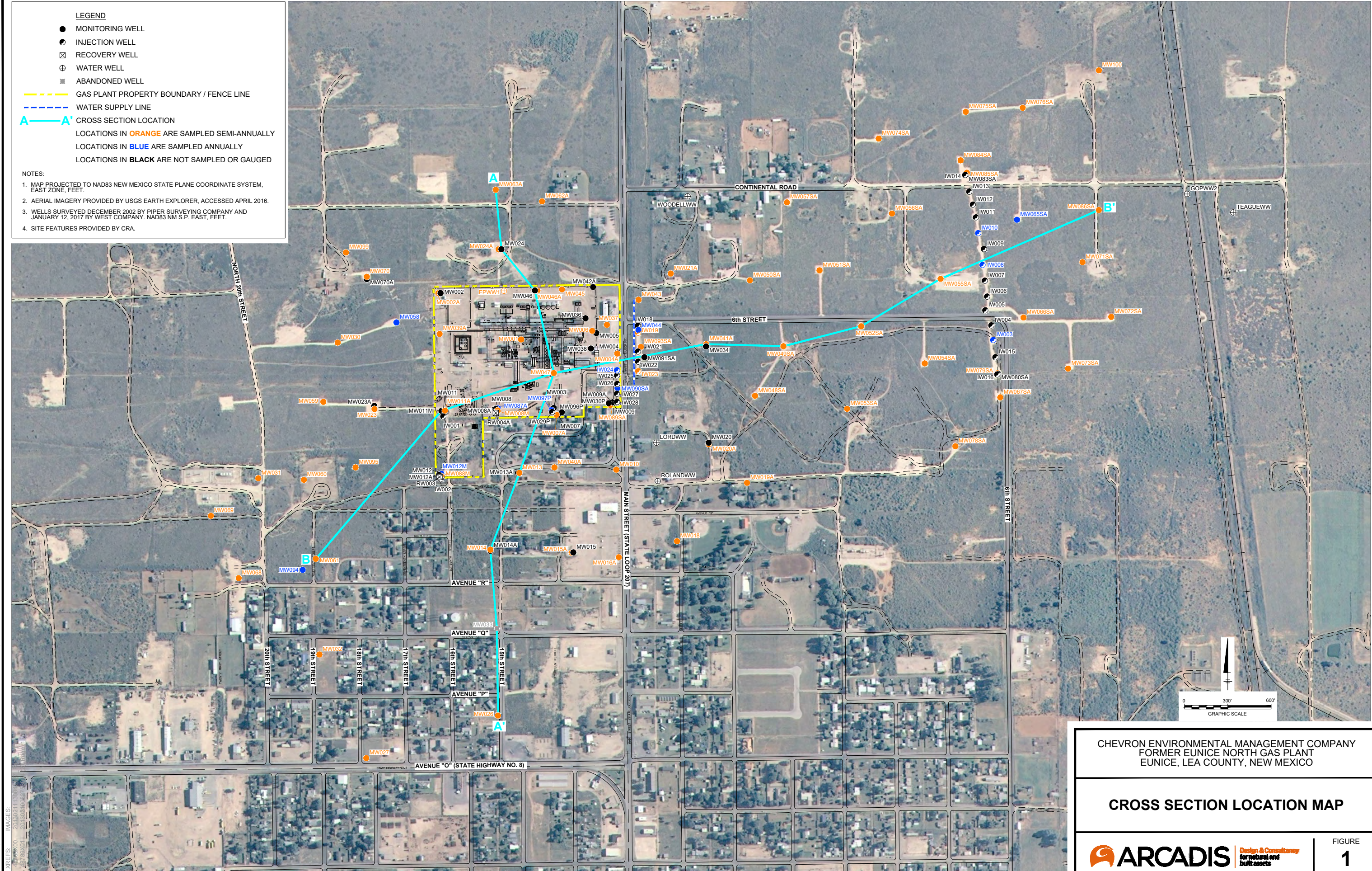
Date: 01/23/2012

APPENDIX B

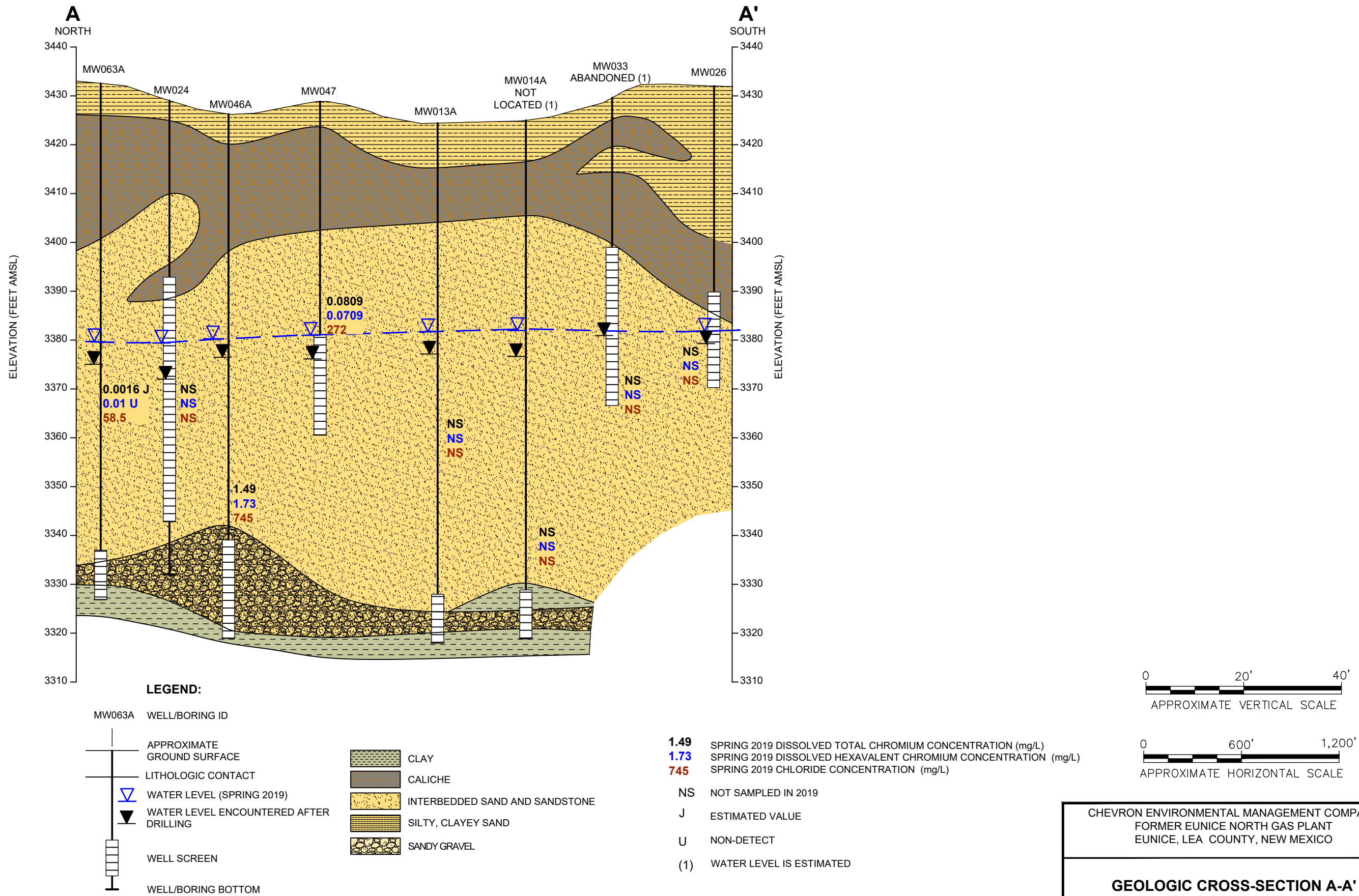
Geologic Cross SectionsNMOCD Discharge Permit GW-004



CITY: SAN RAFAEL, CA DIV/GROUP: EN/CAD DB: J. HARRIS
C:\Users\jharris\Desktop\EN/CAD\B0048789\000\0004\ASAP\DWG\48789E02.dwg LAYOUT: 1. SAVED: 3/7/2017 9:57 AM ACADVER: 18.15 (LMS TECH) PAGES/SETUP: --- PLOTSTYLE/TABLE: --- PLOTTED: 3/7/2017 10:10 AM BY: HARRIS, JESSICA



CITY: (KNOXVILLE) DIV: (GROUP: (ENV/GIS) DB: (BALTOM) LD: (C. SMITH) PIC: (M. FLEISCHNER) PW: (L. MINER) TM: (J. FRIZZELL)
C:\Users\wdbemag\ARCADIS-US\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant\Site S\2019\30000811401-DWG\EUNICE NORTH SECT V01.dwg LAYOUT: A-A' SAVED: 11/27/2019 1:59 PM ACADVER: 23.05 (LMS TECH) PAGES: 10 PAGESETUP: ---- PLOTSTYLETABLE: PLT\FULLCTB PLOTTED: 11/27/2019 3:45 PM BY: BERNDGEN, WENDY



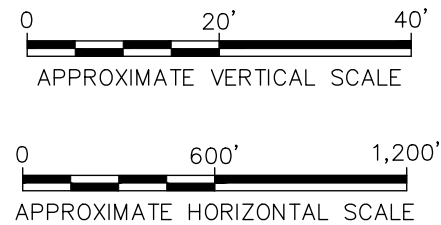
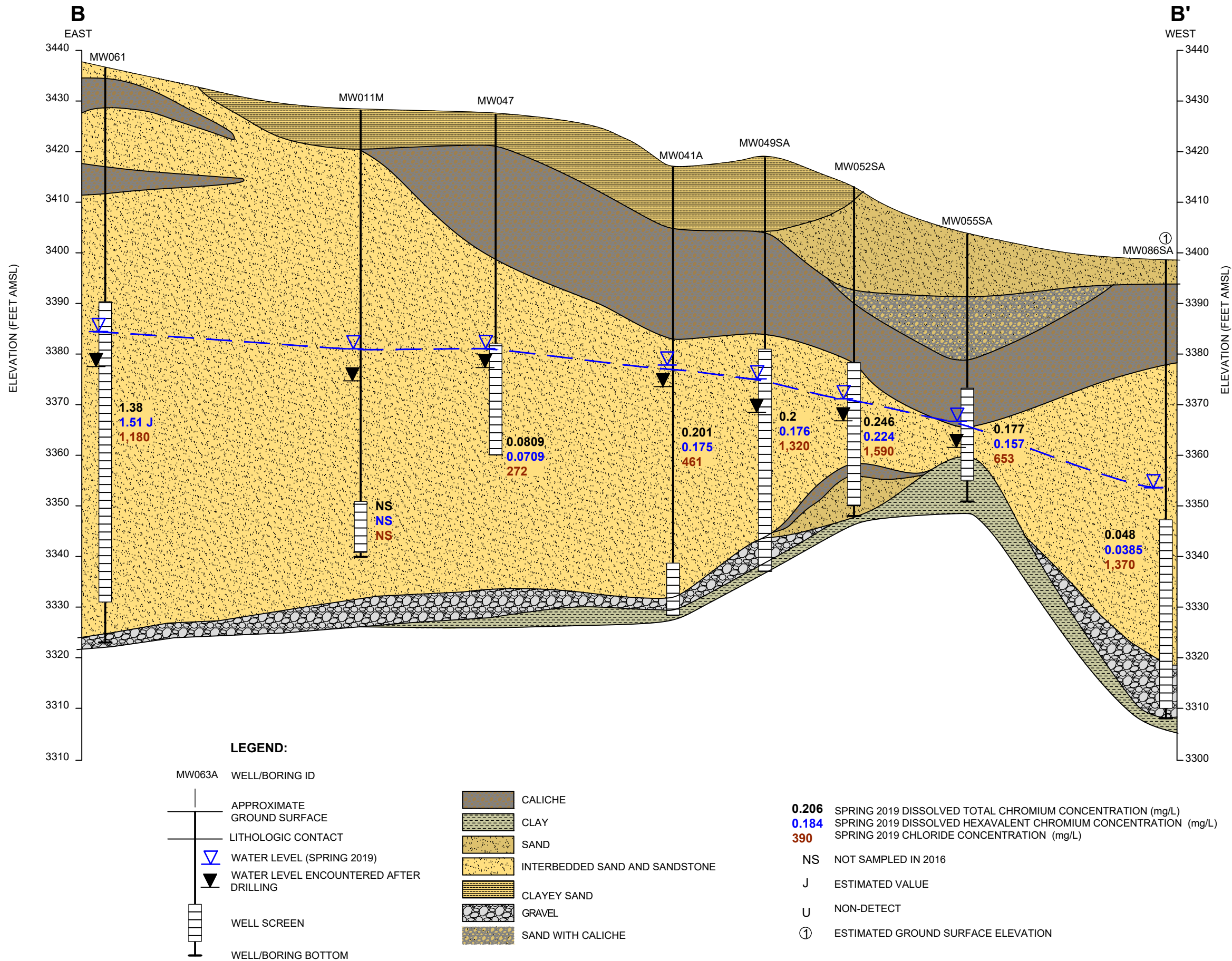
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
FORMER EUNICE NORTH GAS PLANT
EUNICE, LEA COUNTY, NEW MEXICO

GEOLOGIC CROSS-SECTION A-A'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
A-A'

CITY: (KNOXVILLE) DIV: (GROUP: (ENV/OS) DB: (B: (ALTO) LD: (C: (SMITH) PC: (M: (FLEISCHNER) PM: (L: (MINER) TM: (J: (FRIZZELL)
C:\Users\wadm\OneDrive\ARCADIS\US\BIM\360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant\Site S120193000611401-DWG\EUNICE NORTH SECT V01.dwg LAYOUT: B-B SAVED: 11/27/2019 1:59 PM ACADVER: 23.0S (LMS TECH) PAGES: 76 OF 1146 PLOTSTYLETABLE: PLT: FULL.CTB PLOTTED: 11/27/2019 3:49 PM BY: BERNDGEN, WENDY



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
FORMER EUNICE NORTH GAS PLANT
EUNICE, LEA COUNTY, NEW MEXICO

GEOLOGIC CROSS-SECTION B-B'

ARCADIS Design & Consultancy
for natural and
built assets

FIGURE
B-B

APPENDIX C

Historical Groundwater Elevations



Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
EPWW1	04/22/1997	3429.95	66.46	NM	NA	3363.49
EPWW1	12/18/1997	3429.95	73.12	NM	NA	3356.83
EPWW1	11/16/1999	3429.95	65.20	NM	NA	3364.75
EPWW1	05/15/2001	3429.95	52.27	NM	NA	3377.68
EPWW1	08/23/2001	3429.95	52.86	NM	NA	3377.09
EPWW1	01/21/2002	3429.95	52.67	NM	NA	3377.28
EPWW1	04/04/2002	3429.95	93.34	NM	NA	3336.61
EPWW1	09/03/2002	3429.95	50.85	NM	NA	3379.10
EPWW1	12/02/2002	3429.95	51.59	NM	NA	3378.36
EPWW1	01/31/2003	3429.95	52.20	NM	NA	3377.75
EPWW1	03/28/2003	3429.95	52.58	NM	NA	3377.37
EPWW1	05/19/2003	3429.95	52.26	NM	NA	3377.69
EPWW1	09/09/2003	3429.95	94.08	NM	NA	3335.87
EPWW1	12/03/2003	3429.95	94.07	NM	NA	3335.88
EPWW1	03/30/2004	3429.95	86.62	NM	NA	3343.33
EPWW1	06/07/2004	3429.95	77.45	NM	NA	3352.50
EPWW1	09/17/2004	3429.95	52.22	NM	NA	3377.73
EPWW1	11/30/2004	3429.95	57.80	NM	NA	3372.15
EPWW1	03/31/2005	3429.95	51.39	NM	NA	3378.56
EPWW1	05/23/2005	3429.95	51.16	NM	NA	3378.79
EPWW1	03/01/2010	3429.95	0.00	NM	NA	3429.95
GOPWW2	01/01/2000	3396.97	49.02	NM	NA	3347.95
GOPWW2	12/04/2002	3396.97	49.54	NM	NA	3347.43
GOPWW2	01/31/2003	3396.97	49.42	NM	NA	3347.55
GOPWW2	03/28/2003	3396.97	49.14	NM	NA	3347.83
GOPWW2	05/19/2003	3396.97	49.21	NM	NA	3347.76
GOPWW2	09/09/2003	3396.97	49.37	NM	NA	3347.60
GOPWW2	12/02/2003	3396.97	49.71	NM	NA	3347.26
GOPWW2	03/30/2004	3396.97	49.54	NM	NA	3347.43
GOPWW2	06/07/2004	3396.97	49.31	NM	NA	3347.66
GOPWW2	09/14/2004	3396.97	49.45	NM	NA	3347.52
GOPWW2	11/29/2004	3396.97	49.22	NM	NA	3347.75
GOPWW2	03/31/2005	3396.97	48.81	NM	NA	3348.16
GOPWW2	05/23/2005	3396.67	48.52	NM	NA	3348.15
GOPWW2	01/18/2006	3396.67	48.00	NM	NA	3348.67
GOPWW2	06/23/2006	3396.67	47.65	NM	NA	3349.02
GOPWW2	04/23/2007	3396.67	47.15	NM	NA	3349.52
GOPWW2	09/10/2007	3396.67	46.70	NM	NA	3349.97
GOPWW2	03/21/2008	3396.67	46.46	NM	NA	3350.21
GOPWW2	08/04/2008	3396.67	46.47	NM	NA	3350.20
GOPWW2	03/10/2009	3396.67	46.59	NM	NA	3350.08
GOPWW2	07/28/2009	3396.67	46.44	NM	NA	3350.23
GOPWW2	03/01/2010	3396.67	46.51	NM	NA	3350.16
GOPWW2	07/30/2010	3396.67	53.94	NM	NA	3342.73
GOPWW2	05/04/2011	3396.67	46.69	NM	NA	3349.98
GOPWW2	11/02/2011	3396.67	47.06	NM	NA	3349.61
GOPWW2	05/01/2012	3396.67	47.00	NM	NA	3349.67
GOPWW2	05/23/2013	3396.67	46.97	NM	NA	3349.70
IW001	08/01/2002	3431.91	53.19	NM	NA	3378.72
IW001	12/02/2002	3431.91	52.90	NM	NA	3379.01
IW001	01/30/2003	3431.91	52.85	NM	NA	3379.06
IW001	03/28/2003	3431.91	52.94	NM	NA	3378.97
IW001	05/19/2003	3431.91	50.91	NM	NA	3381
IW001	09/09/2003	3431.91	52.62	NM	NA	3379.29
IW001	12/03/2003	3431.91	53.03	NM	NA	3378.88
IW001	03/30/2004	3431.91	52.98	NM	NA	3378.93
IW001	06/07/2004	3431.91	53.93	NM	NA	3377.98
IW001	11/30/2004	3431.91	53.04	NM	NA	3378.87
IW001	03/31/2005	3431.91	53.62	NM	NA	3378.29
IW001	05/23/2005	3431.91	52.58	NM	NA	3379.33
IW001	01/18/2006	3431.91	49.50	NM	NA	3382.41
IW001	06/19/2006	3431.91	51.28	NM	NA	3380.63
IW001	04/16/2007	3431.91	48.85	NM	NA	3383.06
IW001	03/24/2008	3431.91	50.70	NM	NA	3381.21
IW001	03/10/2009	3431.91	48.98	NM	NA	3382.93
IW001	03/01/2010	3431.91	49.23	NM	NA	3382.68
IW001	08/03/2010	3431.91	49.23	NM	NA	3382.68
IW001	05/05/2011	3431.91	49.05	NM	NA	3382.86
IW001	11/02/2011	3431.91	47.28	NM	NA	3384.63
IW001	05/03/2012	3431.91	49.25	NM	NA	3382.66

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW001	10/23/2012	3431.91	49.35	NM	NA	3382.56
IW001	05/02/2013	3431.91	50.51	NM	NA	3381.4
IW001	10/29/2013	3431.91	49.54	NM	NA	3382.37
IW001	05/05/2014	3431.91	49.64	NM	NA	3382.27
IW001	11/03/2014	3431.91	49.46	NM	NA	3382.45
IW001	05/06/2015	3431.91	49.17	NM	NA	3382.74
IW001	09/16/2015	3431.91	48.95	NM	NA	3382.96
IW001	11/02/2015	3431.91	49.05	NM	NA	3382.86
IW001	05/12/2016	3431.91	49.13	NM	NA	3382.78
IW001**	05/03/2017	3431.91	47.55	NM	NA	3384.36
IW002	09/03/2002	3430.33	53.14	NM	NA	3377.19
IW002	12/02/2002	3430.33	50.99	NM	NA	3379.34
IW002	01/30/2003	3430.33	50.88	NM	NA	3379.45
IW002	03/28/2003	3430.33	50.99	NM	NA	3379.34
IW002	05/19/2003	3430.33	50.88	NM	NA	3379.45
IW002	09/09/2003	3430.33	51.46	NM	NA	3378.87
IW002	12/03/2003	3430.33	50.94	NM	NA	3379.39
IW002	03/30/2004	3431.00	51.62	NM	NA	3379.38
IW002	06/07/2004	3431.00	51.61	NM	NA	3379.39
IW002	11/30/2004	3431.00	51.34	NM	NA	3379.66
IW002	03/31/2005	3431.00	51.54	NM	NA	3379.46
IW002	05/23/2005	3431.00	51.36	NM	NA	3379.64
IW002	01/18/2006	3431.00	47.48	NM	NA	3383.52
IW002	06/19/2006	3431.00	48.71	NM	NA	3382.29
IW002	04/11/2007	3431.00	47.05	NM	NA	3383.95
IW002	03/21/2008	3431.00	46.19	NM	NA	3384.81
IW002	03/10/2009	3431.00	46.99	NM	NA	3384.01
IW002	03/01/2010	3431.00	47.31	NM	NA	3383.69
IW002	08/03/2010	3431.00	46.30	NM	NA	3384.70
IW002	05/05/2011	3431.00	46.98	NM	NA	3384.02
IW002	11/02/2011	3430.33	50.86	NM	NA	3379.47
IW002	05/03/2012	3430.33	47.35	NM	NA	3382.98
IW002	10/24/2012	3430.33	47.42	NM	NA	3382.91
IW002	05/01/2013	3430.33	47.60	NM	NA	3382.73
IW002	10/29/2013	3430.33	44.41	NM	NA	3385.92
IW002	05/05/2014	3430.33	47.69	NM	NA	3382.64
IW002	11/03/2014	3430.33	48.78	NM	NA	3381.55
IW002	05/06/2015	3430.33	47.31	NM	NA	3383.02
IW002	09/16/2015	3430.33	47.04	NM	NA	3383.29
IW002	11/03/2015	3430.33	47.15	NM	NA	3383.18
IW002	05/09/2016	3430.33	47.01	NM	NA	3383.32
IW002	05/02/2017	3430.33	46.64	NM	NA	3383.69
IW003	12/16/2003	3406.68	45.47	NM	NA	3361.21
IW003	02/18/2004	3406.68	45.37	NM	NA	3361.31
IW003	03/30/2004	3406.68	45.37	NM	NA	3361.31
IW003	06/03/2004	3406.68	44.39	NM	NA	3362.29
IW003	11/29/2004	3406.68	45.95	NM	NA	3360.73
IW003	03/17/2005	3406.68	45.26	NM	NA	3361.42
IW003	05/23/2005	3406.68	45.10	NM	NA	3361.58
IW003	01/17/2006	3406.68	44.76	NM	NA	3361.92
IW003	06/16/2006	3406.68	44.77	NM	NA	3361.91
IW003	04/09/2007	3406.68	46.30	NM	NA	3360.38
IW003	03/21/2008	3406.68	44.71	NM	NA	3361.97
IW003	03/10/2009	3406.68	44.96	NM	NA	3361.72
IW003	03/01/2010	3406.68	45.19	NM	NA	3361.49
IW003	08/03/2010	3406.68	45.20	NM	NA	3361.48
IW003	05/05/2011	3406.68	45.29	NM	NA	3361.39
IW003	11/03/2011	3406.68	45.61	NM	NA	3361.07
IW003	05/02/2012	3406.68	45.37	NM	NA	3361.31
IW003	10/23/2012	3406.68	45.57	NM	NA	3361.11
IW003	04/29/2013	3406.68	45.43	NM	NA	3361.25
IW003	10/29/2013	3406.68	45.64	NM	NA	3361.04
IW003	05/05/2014	3406.68	45.51	NM	NA	3361.17
IW003	11/03/2014	3406.68	45.67	NM	NA	3361.01
IW003	05/05/2015	3406.68	45.30	NM	NA	3361.38
IW003	11/03/2015	3406.68	45.52	NM	NA	3361.16
IW003	05/10/2016	3406.68	45.02	NM	NA	3361.66
IW003	09/15/2016	3406.68	45.56	NM	NA	3361.12
IW003	05/02/2017	3406.68	44.98	NM	NA	3361.70
IW003	03/20/2018	3406.68	44.81	NM	NA	3361.87

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW003	04/09/2019	3406.68	44.18	NM	NA	3362.50
IW004	12/16/2003	3406.31	45.04	NM	NA	3361.27
IW004	02/18/2004	3406.31	44.95	NM	NA	3361.36
IW004	03/30/2004	3406.31	44.97	NM	NA	3361.34
IW004	06/07/2004	3406.31	45.99	NM	NA	3360.32
IW004	11/29/2004	3406.31	45.31	NM	NA	3361.00
IW004	03/17/2005	3406.31	44.83	NM	NA	3361.48
IW004	05/23/2005	3406.31	44.43	NM	NA	3361.88
IW004	01/17/2006	3406.31	44.52	NM	NA	3361.79
IW004	06/16/2006	3406.31	44.36	NM	NA	3361.95
IW004	04/09/2007	3406.31	44.15	NM	NA	3362.16
IW004	03/21/2008	3406.31	44.25	NM	NA	3362.06
IW004	03/10/2009	3406.31	44.44	NM	NA	3361.87
IW004	03/01/2010	3406.31	44.65	NM	NA	3361.66
IW004	08/03/2010	3406.31	44.75	NM	NA	3361.56
IW004	05/05/2011	3406.31	44.91	NM	NA	3361.40
IW004	11/03/2011	3406.31	45.14	NM	NA	3361.17
IW004	05/02/2012	3406.31	45.00	NM	NA	3361.31
IW004	10/23/2012	3406.31	46.16	NM	NA	3360.15
IW004	04/29/2013	3406.31	45.10	NM	NA	3361.21
IW004	10/29/2013	3406.31	45.31	NM	NA	3361.00
IW004	05/05/2014	3406.31	45.16	NM	NA	3361.15
IW004	11/03/2014	3406.31	45.30	NM	NA	3361.01
IW004	05/05/2015	3406.31	44.90	NM	NA	3361.41
IW004	11/03/2015	3406.31	45.03	NM	NA	3361.28
IW004	05/10/2016	3406.31	44.64	NM	NA	3361.67
IW004	09/15/2016	3406.31	45.05	NM	NA	3361.26
IW004	05/02/2017	3406.31	44.57	NM	NA	3361.74
IW005	12/16/2003	3405.36	45.85	NM	NA	3359.51
IW005	02/18/2004	3405.36	43.85	NM	NA	3361.51
IW005	03/30/2004	3405.36	43.84	NM	NA	3361.52
IW005	06/07/2004	3405.36	45.02	NM	NA	3360.34
IW005	11/29/2004	3405.36	44.52	NM	NA	3360.84
IW005	03/21/2005	3405.36	43.72	NM	NA	3361.64
IW005	05/23/2005	3405.36	42.71	NM	NA	3362.65
IW005	01/17/2006	3405.36	43.75	NM	NA	3361.61
IW005	06/16/2006	3405.36	43.62	NM	NA	3361.74
IW005	04/12/2007	3405.36	43.82	NM	NA	3361.54
IW005	03/21/2008	3405.36	43.51	NM	NA	3361.85
IW005	03/10/2009	3405.36	43.68	NM	NA	3361.68
IW005	03/01/2010	3405.36	43.84	NM	NA	3361.52
IW005	07/30/2010	3405.36	43.88	NM	NA	3361.48
IW005	05/05/2011	3405.36	43.95	NM	NA	3361.41
IW005	11/03/2011	3405.36	44.18	NM	NA	3361.18
IW005	05/02/2012	3405.36	44.00	NM	NA	3361.36
IW005	10/23/2012	3405.36	44.29	NM	NA	3361.07
IW005	04/29/2013	3405.36	44.14	NM	NA	3361.22
IW005	10/29/2013	3405.36	44.38	NM	NA	3360.98
IW005	05/05/2014	3405.36	43.97	NM	NA	3361.39
IW005	11/03/2014	3405.36	44.33	NM	NA	3361.03
IW005	05/05/2015	3405.36	43.61	NM	NA	3361.75
IW005	11/02/2015	3405.36	44.06	NM	NA	3361.30
IW005	05/10/2016	3405.36	43.84	NM	NA	3361.52
IW005	09/15/2016	3405.36	44.13	NM	NA	3361.23
IW005	05/01/2017	3405.36	43.60	NM	NA	3361.76
IW006	12/16/2003	3404.36	45.14	NM	NA	3359.22
IW006	02/18/2004	3404.36	43.24	NM	NA	3361.12
IW006	03/30/2004	3404.36	43.24	NM	NA	3361.12
IW006	06/07/2004	3404.36	44.18	NM	NA	3360.18
IW006	11/29/2004	3404.36	43.75	NM	NA	3360.61
IW006	03/21/2005	3404.36	42.86	NM	NA	3361.50
IW006	05/23/2005	3404.36	42.54	NM	NA	3361.82
IW006	01/17/2006	3404.36	42.68	NM	NA	3361.68
IW006	06/16/2006	3404.36	42.57	NM	NA	3361.79
IW006	03/27/2007	3404.36	42.49	NM	NA	3361.87
IW006	04/12/2007	3404.36	42.32	NM	NA	3362.04
IW006	03/21/2008	3404.36	42.65	NM	NA	3361.71
IW006	03/10/2009	3404.36	42.78	NM	NA	3361.58
IW006	03/01/2010	3404.36	44.73	NM	NA	3359.63
IW006	07/30/2010	3404.36	47.99	NM	NA	3356.37

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW006	05/05/2011	3404.36	43.04	NM	NA	3361.32
IW006	11/03/2011	3404.36	43.30	NM	NA	3361.06
IW006	05/02/2012	3404.36	43.13	NM	NA	3361.23
IW006	10/23/2012	3404.36	43.44	NM	NA	3360.92
IW006	04/29/2013	3404.36	43.27	NM	NA	3361.09
IW006	10/29/2013	3404.36	43.55	NM	NA	3360.81
IW006	05/05/2014	3404.36	43.11	NM	NA	3361.25
IW006	11/03/2014	3404.36	43.53	NM	NA	3360.83
IW006	05/05/2015	3404.36	42.74	NM	NA	3361.62
IW006	11/02/2015	3404.36	43.20	NM	NA	3361.16
IW006	05/10/2016	3404.36	42.71	NM	NA	3361.65
IW006	09/15/2016	3404.36	43.30	NM	NA	3361.06
IW006	05/01/2017	3404.36	42.70	NM	NA	3361.66
IW007	12/16/2003	3405.31	45.65	NM	NA	3359.66
IW007	02/18/2004	3405.31	44.09	NM	NA	3361.22
IW007	03/30/2004	3405.31	44.31	NM	NA	3361.00
IW007	06/07/2004	3405.31	43.54	NM	NA	3361.77
IW007	11/29/2004	3405.31	44.62	NM	NA	3360.69
IW007	03/22/2005	3405.31	43.24	NM	NA	3362.07
IW007	05/23/2005	3405.31	43.83	NM	NA	3361.48
IW007	01/17/2006	3405.31	43.91	NM	NA	3361.40
IW007	06/16/2006	3405.31	43.94	NM	NA	3361.37
IW007	03/26/2007	3405.31	43.48	NM	NA	3361.83
IW007	03/21/2008	3405.31	43.79	NM	NA	3361.52
IW007	03/10/2009	3405.31	44.21	NM	NA	3361.10
IW007	03/01/2010	3405.31	45.09	NM	NA	3360.22
IW007	07/30/2010	3405.31	45.80	NM	NA	3359.51
IW007	05/05/2011	3405.31	45.45	NM	NA	3359.86
IW007	11/03/2011	3405.31	46.46	NM	NA	3358.85
IW007	05/02/2012	3405.31	46.19	NM	NA	3359.12
IW007	10/23/2012	3405.31	46.93	NM	NA	3358.38
IW007	04/29/2013	3405.31	46.70	NM	NA	3358.61
IW007	10/29/2013	3405.31	47.48	NM	NA	3357.83
IW007	05/05/2014	3405.31	47.15	NM	NA	3358.16
IW007	11/03/2014	3405.31	47.37	NM	NA	3357.94
IW007	05/05/2015	3405.31	46.90	NM	NA	3358.41
IW007	11/02/2015	3405.31	48.22	NM	NA	3357.09
IW007	05/10/2016	3405.31	47.33	NM	NA	3357.98
IW007	09/15/2016	3405.31	47.45	NM	NA	3357.86
IW007	05/01/2017	3405.31	46.45	NM	NA	3358.86
IW008	12/16/2003	3405.37	50.61	NM	NA	3354.76
IW008	02/18/2004	3405.37	50.13	NM	NA	3355.24
IW008	03/30/2004	3405.37	51.08	NM	NA	3354.29
IW008	06/07/2004	3405.37	45.54	NM	NA	3359.83
IW008	11/29/2004	3405.37	43.98	NM	NA	3361.39
IW008	03/22/2005	3405.37	43.55	NM	NA	3361.82
IW008	05/23/2005	3405.37	43.85	NM	NA	3361.52
IW008	01/17/2006	3405.37	44.03	NM	NA	3361.34
IW008	06/16/2006	3405.37	44.07	NM	NA	3361.30
IW008	03/23/2007	3405.37	46.50	NM	NA	3358.87
IW008	03/21/2008	3405.37	44.80	NM	NA	3360.57
IW008	03/10/2009	3405.37	48.17	NM	NA	3357.20
IW008	03/01/2010	3405.37	47.10	NM	NA	3358.27
IW008	07/30/2010	3405.37	44.74	NM	NA	3360.63
IW008	05/05/2011	3405.37	44.69	NM	NA	3360.68
IW008	11/03/2011	3405.37	44.85	NM	NA	3360.52
IW008	05/02/2012	3405.37	44.78	NM	NA	3360.59
IW008	10/23/2012	3405.37	44.89	NM	NA	3360.48
IW008	04/29/2013	3405.37	44.94	NM	NA	3360.43
IW008	10/29/2013	3405.37	44.85	NM	NA	3360.52
IW008	05/05/2014	3405.37	44.85	NM	NA	3360.52
IW008	11/03/2014	3405.37	45.03	NM	NA	3360.34
IW008	05/05/2015	3405.37	44.78	NM	NA	3360.59
IW008	11/02/2015	3405.37	45.06	NM	NA	3360.31
IW008	05/10/2016	3405.37	44.75	NM	NA	3360.62
IW008	09/15/2016	3405.37	45.05	NM	NA	3360.32
IW008	05/01/2017	3405.37	44.70	NM	NA	3360.67
IW008	03/20/2018	3405.37	44.69	NM	NA	3360.68
IW008	04/09/2019	3405.37	44.32	NM	NA	3361.05
IW009	12/16/2003	3406.07	47.22	NM	NA	3358.85

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW009	02/18/2004	3406.07	47.40	NM	NA	3358.67
IW009	03/30/2004	3406.07	47.49	NM	NA	3358.58
IW009	06/07/2004	3406.07	44.55	NM	NA	3361.52
IW009	11/29/2004	3406.07	44.74	NM	NA	3361.33
IW009	03/22/2005	3406.07	44.30	NM	NA	3361.77
IW009	05/23/2005	3406.07	44.30	NM	NA	3361.77
IW009	01/17/2006	3406.07	45.02	NM	NA	3361.05
IW009	06/16/2006	3406.07	45.41	NM	NA	3360.66
IW009	03/23/2007	3406.07	46.27	NM	NA	3359.80
IW009	03/21/2008	3406.07	46.42	NM	NA	3359.65
IW009	03/10/2009	3406.07	47.12	NM	NA	3358.95
IW009	03/01/2010	3406.07	47.36	NM	NA	3358.71
IW009	07/30/2010	3406.07	47.70	NM	NA	3358.37
IW009	05/05/2011	3406.07	47.50	NM	NA	3358.57
IW009	11/03/2011	3406.07	47.89	NM	NA	3358.18
IW009	05/02/2012	3406.07	47.70	NM	NA	3358.37
IW009	10/23/2012	3406.07	47.57	NM	NA	3358.50
IW009	04/29/2013	3406.07	47.52	NM	NA	3358.55
IW009	10/29/2013	3406.07	40.10	NM	NA	3365.97
IW009	05/05/2014	3406.07	47.31	NM	NA	3358.76
IW009	11/03/2014	3406.07	48.01	NM	NA	3358.06
IW009	05/05/2015	3406.07	47.77	NM	NA	3358.30
IW009	11/02/2015	3406.07	47.95	NM	NA	3358.12
IW009	05/10/2016	3406.07	47.64	NM	NA	3358.43
IW009	09/15/2016	3406.07	48.00	NM	NA	3358.07
IW009	05/01/2017	3406.07	47.81	NM	NA	3358.26
IW010	12/16/2003	3405.82	52.88	NM	NA	3352.94
IW010	02/18/2004	3405.82	53.48	NM	NA	3352.34
IW010	03/30/2004	3405.82	53.52	NM	NA	3352.30
IW010	06/07/2004	3405.82	54.65	NM	NA	3351.17
IW010	11/29/2004	3405.82	54.45	NM	NA	3351.37
IW010	03/22/2005	3405.82	53.45	NM	NA	3352.37
IW010	05/23/2005	3405.82	53.21	NM	NA	3352.61
IW010	01/17/2006	3405.82	53.45	NM	NA	3352.37
IW010	06/16/2006	3405.82	52.93	NM	NA	3352.89
IW010	03/23/2007	3405.82	53.48	NM	NA	3352.34
IW010	03/21/2008	3405.82	53.30	NM	NA	3352.52
IW010	03/10/2009	3405.82	53.55	NM	NA	3352.27
IW010	03/01/2010	3405.82	53.59	NM	NA	3352.23
IW010	07/30/2010	3405.82	53.46	NM	NA	3352.36
IW010	05/05/2011	3405.82	53.78	NM	NA	3352.04
IW010	11/03/2011	3405.82	53.90	NM	NA	3351.92
IW010	05/02/2012	3405.82	53.86	NM	NA	3351.96
IW010	10/23/2012	3405.82	54.04	NM	NA	3351.78
IW010	04/29/2013	3405.82	54.05	NM	NA	3351.77
IW010	10/29/2013	3405.82	54.08	NM	NA	3351.74
IW010	05/05/2014	3405.82	53.75	NM	NA	3352.07
IW010	11/03/2014	3405.82	53.90	NM	NA	3351.92
IW010	05/05/2015	3405.82	53.17	NM	NA	3352.65
IW010	11/02/2015	3405.82	53.41	NM	NA	3352.41
IW010	05/10/2016	3405.82	52.82	NM	NA	3353.00
IW010	09/15/2016	3405.82	53.14	NM	NA	3352.68
IW010	05/01/2017	3405.82	52.41	NM	NA	3353.41
IW010	03/20/2018	3405.82	52.26	NM	NA	3353.56
IW010	04/09/2019	3405.82	51.98	NM	NA	3353.84
IW011	12/16/2003	3406.83	57.60	NM	NA	3349.23
IW011	02/18/2004	3406.83	57.59	NM	NA	3349.24
IW011	03/30/2004	3406.83	57.64	NM	NA	3349.19
IW011	06/07/2004	3406.83	58.79	NM	NA	3348.04
IW011	11/29/2004	3406.83	58.81	NM	NA	3348.02
IW011	03/23/2005	3406.83	58.19	NM	NA	3348.64
IW011	05/23/2005	3406.83	57.51	NM	NA	3349.32
IW011	01/17/2006	3406.83	57.79	NM	NA	3349.04
IW011	06/16/2006	3406.83	56.93	NM	NA	3349.90
IW011	03/22/2007	3406.83	56.21	NM	NA	3350.62
IW011	03/21/2008	3406.83	55.44	NM	NA	3351.39
IW011	03/10/2009	3406.83	55.51	NM	NA	3351.32
IW011	03/01/2010	3406.83	55.48	NM	NA	3351.35
IW011	07/30/2010	3406.83	55.36	NM	NA	3351.47
IW011	05/05/2011	3406.83	55.55	NM	NA	3351.28

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW011	11/03/2011	3406.83	55.85	NM	NA	3350.98
IW011	05/02/2012	3406.83	55.83	NM	NA	3351.00
IW011	10/23/2012	3406.83	55.87	NM	NA	3350.96
IW011	04/29/2013	3406.83	55.83	NM	NA	3351.00
IW011	10/29/2013	3406.83	55.90	NM	NA	3350.93
IW011	05/05/2014	3406.83	55.60	NM	NA	3351.23
IW011	11/03/2014	3406.83	65.80	NM	NA	3341.03
IW011	05/05/2015	3406.83	35.09	NM	NA	3371.74
IW011	11/02/2015	3406.83	55.28	NM	NA	3351.55
IW011	05/10/2016	3406.83	54.50	NM	NA	3352.33
IW011	09/15/2016	3406.83	54.70	NM	NA	3352.13
IW011**	05/01/2017	3406.83	56.86	NM	NA	3349.97
IW012	02/18/2004	3405.92	54.99	NM	NA	3350.93
IW012	06/07/2004	3405.92	53.24	NM	NA	3352.68
IW012	11/29/2004	3405.92	56.03	NM	NA	3349.89
IW012	03/24/2005	3405.92	55.03	NM	NA	3350.89
IW012	05/23/2005	3405.92	53.20	NM	NA	3352.72
IW012	06/16/2006	3405.92	55.44	NM	NA	3350.48
IW012	03/22/2007	3405.92	58.98	NM	NA	3346.94
IW012	03/21/2008	3405.92	54.29	NM	NA	3351.63
IW012	03/10/2009	3405.92	54.26	NM	NA	3351.66
IW012	03/01/2010	3405.92	54.18	NM	NA	3351.74
IW012	07/30/2010	3405.92	54.11	NM	NA	3351.81
IW012	05/05/2011	3405.92	54.29	NM	NA	3351.63
IW012	11/03/2011	3405.92	54.53	NM	NA	3351.39
IW012	05/02/2012	3405.92	54.83	NM	NA	3351.09
IW012	10/23/2012	3405.92	54.55	NM	NA	3351.37
IW012	04/29/2013	3405.92	54.55	NM	NA	3351.37
IW012	10/29/2013	3405.92	54.69	NM	NA	3351.23
IW012	05/05/2014	3405.92	54.17	NM	NA	3351.75
IW012	11/03/2014	3405.92	54.24	NM	NA	3351.68
IW012	05/05/2015	3405.92	53.72	NM	NA	3352.20
IW012	11/02/2015	3405.92	53.70	NM	NA	3352.22
IW012	05/10/2016	3405.92	53.16	NM	NA	3352.76
IW012	09/15/2016	3405.92	53.13	NM	NA	3352.79
IW012	05/01/2017	3405.92	52.35	NM	NA	3353.57
IW013	02/18/2004	3406.62	56.27	NM	NA	3350.35
IW013	03/30/2004	3406.62	56.34	NM	NA	3350.28
IW013	06/07/2004	3406.62	51.56	NM	NA	3355.06
IW013	11/29/2004	3406.62	57.36	NM	NA	3349.26
IW013	03/24/2005	3406.62	56.72	NM	NA	3349.90
IW013	05/23/2005	3406.62	56.81	NM	NA	3349.81
IW013	01/17/2006	3406.62	56.15	NM	NA	3350.47
IW013	06/16/2006	3406.62	55.72	NM	NA	3350.90
IW013	03/21/2008	3406.62	54.13	NM	NA	3352.49
IW013	03/10/2009	3406.62	54.12	NM	NA	3352.50
IW013	03/01/2010	3406.62	54.33	NM	NA	3352.29
IW013	07/30/2010	3406.62	53.94	NM	NA	3352.68
IW013	05/05/2011	3406.62	54.10	NM	NA	3352.52
IW013	11/03/2011	3406.62	54.35	NM	NA	3352.27
IW013	05/02/2012	3406.62	54.33	NM	NA	3352.29
IW013	10/23/2012	3406.62	54.38	NM	NA	3352.24
IW013	04/29/2013	3406.62	54.37	NM	NA	3352.25
IW013	10/29/2013	3406.62	54.42	NM	NA	3352.20
IW013	05/05/2014	3406.62	54.16	NM	NA	3352.46
IW013	11/03/2014	3406.62	54.30	NM	NA	3352.32
IW013	05/05/2015	3406.62	53.69	NM	NA	3352.93
IW013	11/02/2015	3406.62	53.80	NM	NA	3352.82
IW013	05/10/2016	3406.62	53.15	NM	NA	3353.47
IW013	09/15/2016	3406.62	53.30	NM	NA	3353.32
IW013	05/01/2017	3406.62	52.62	NM	NA	3354.00
IW014	02/18/2004	3405.48	54.55	NM	NA	3350.93
IW014	03/30/2004	3405.48	54.59	NM	NA	3350.89
IW014	11/29/2004	3405.48	55.88	NM	NA	3349.60
IW014	03/24/2005	3405.48	55.54	NM	NA	3349.94
IW014	05/23/2005	3405.48	55.02	NM	NA	3350.46
IW014	01/17/2006	3405.48	54.66	NM	NA	3350.82
IW014	06/16/2006	3405.48	54.25	NM	NA	3351.23
IW014	03/26/2007	3405.48	53.30	NM	NA	3352.18
IW014	03/21/2008	3405.48	52.64	NM	NA	3352.84

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW014	03/10/2009	3405.48	52.57	NM	NA	3352.91
IW014	03/01/2010	3405.48	54.27	NM	NA	3351.21
IW014	07/30/2010	3405.48	52.37	NM	NA	3353.11
IW014	05/05/2011	3405.48	52.50	NM	NA	3352.98
IW014	11/03/2011	3405.48	52.70	NM	NA	3352.78
IW014	05/02/2012	3405.48	52.66	NM	NA	3352.82
IW014	10/23/2012	3405.48	52.74	NM	NA	3352.74
IW014	04/29/2013	3405.48	52.75	NM	NA	3352.73
IW014	10/29/2013	3405.48	52.78	NM	NA	3352.70
IW014	05/05/2014	3405.48	52.53	NM	NA	3352.95
IW014	11/03/2014	3405.48	52.70	NM	NA	3352.78
IW014	05/05/2015	3405.48	52.09	NM	NA	3353.39
IW014	11/02/2015	3405.48	52.20	NM	NA	3353.28
IW014	05/10/2016	3405.48	51.59	NM	NA	3353.89
IW014	09/14/2016	3405.48	51.73	NM	NA	3353.75
IW014	05/01/2017	3405.48	51.08	NM	NA	3354.40
IW015	02/18/2004	3406.05	45.43	NM	NA	3360.62
IW015	03/30/2004	3406.05	45.45	NM	NA	3360.60
IW015	06/07/2004	3406.05	45.91	NM	NA	3360.14
IW015	11/29/2004	3406.05	46.33	NM	NA	3359.72
IW015	03/16/2005	3406.05	44.97	NM	NA	3361.08
IW015	01/17/2006	3406.05	44.83	NM	NA	3361.22
IW015	06/16/2006	3406.05	44.58	NM	NA	3361.47
IW015	04/09/2007	3406.05	44.38	NM	NA	3361.67
IW015	03/10/2008	3406.05	44.58	NM	NA	3361.47
IW015	03/21/2008	3406.05	44.20	NM	NA	3361.85
IW015	03/01/2010	3406.05	44.79	NM	NA	3361.26
IW015	08/03/2010	3406.05	44.91	NM	NA	3361.14
IW015	05/05/2011	3406.05	45.05	NM	NA	3361.00
IW015	11/03/2011	3406.05	45.60	NM	NA	3360.45
IW015	05/02/2012	3406.05	45.31	NM	NA	3360.74
IW015	10/23/2012	3406.05	45.64	NM	NA	3360.41
IW015	04/29/2013	3406.05	45.35	NM	NA	3360.70
IW015	10/29/2013	3406.05	45.70	NM	NA	3360.35
IW015	05/05/2014	3406.05	45.40	NM	NA	3360.65
IW015	11/03/2014	3406.05	45.71	NM	NA	3360.34
IW015	05/05/2015	3406.05	44.91	NM	NA	3361.14
IW015	11/03/2015	3406.05	45.20	NM	NA	3360.85
IW015	05/11/2016	3406.05	44.42	NM	NA	3361.63
IW015	09/15/2016	3406.05	45.03	NM	NA	3361.02
IW015	05/02/2017	3406.05	44.09	NM	NA	3361.96
IW016	02/18/2004	3408.29	48.16	NM	NA	3360.13
IW016	03/30/2004	3408.29	48.19	NM	NA	3360.10
IW016	06/03/2004	3408.29	49.11	NM	NA	3359.18
IW016	11/29/2004	3408.29	49.26	NM	NA	3359.03
IW016	04/18/2005	3408.29	48.50	NM	NA	3359.79
IW016	05/23/2005	3408.29	48.51	NM	NA	3359.78
IW016	01/17/2006	3408.29	47.45	NM	NA	3360.84
IW016	06/16/2006	3408.29	47.09	NM	NA	3361.20
IW016	03/28/2007	3408.29	46.33	NM	NA	3361.96
IW016	03/10/2008	3408.29	46.70	NM	NA	3361.59
IW016	03/21/2008	3408.29	46.21	NM	NA	3362.08
IW016	03/01/2010	3408.29	47.21	NM	NA	3361.08
IW016	08/03/2010	3408.29	47.27	NM	NA	3361.02
IW016	05/05/2011	3408.29	47.40	NM	NA	3360.89
IW016	11/03/2011	3408.29	48.06	NM	NA	3360.23
IW016	05/02/2012	3408.29	47.78	NM	NA	3360.51
IW016	10/23/2012	3408.29	48.16	NM	NA	3360.13
IW016	04/29/2013	3408.29	47.86	NM	NA	3360.43
IW016	10/29/2013	3408.29	48.25	NM	NA	3360.04
IW016	05/05/2014	3408.29	47.88	NM	NA	3360.41
IW016	11/03/2014	3408.29	48.15	NM	NA	3360.14
IW016	05/05/2015	3408.29	47.15	NM	NA	3361.14
IW016	11/03/2015	3408.29	47.38	NM	NA	3360.91
IW016	05/11/2016	3408.29	46.55	NM	NA	3361.74
IW016	09/15/2016	3408.29	47.03	NM	NA	3361.26
IW016	05/02/2017	3408.29	45.72	NM	NA	3362.57
IW018	01/17/2006	3424.54	45.94	NM	NA	3378.60
IW018	06/20/2006	3424.54	45.82	NM	NA	3378.72
IW018	04/09/2007	3424.54	45.92	NM	NA	3378.62

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW018	03/19/2008	3424.54	45.59	NM	NA	3378.95
IW018	03/10/2009	3424.54	46.05	NM	NA	3378.49
IW018	03/01/2010	3424.54	44.87	NM	NA	3379.67
IW018	08/02/2010	3424.54	46.18	NM	NA	3378.36
IW018	05/05/2011	3424.54	45.94	NM	NA	3378.60
IW018	11/04/2011	3424.54	46.30	NM	NA	3378.24
IW018	05/02/2012	3424.54	46.37	NM	NA	3378.17
IW018	10/24/2012	3424.54	46.74	NM	NA	3377.80
IW018	04/30/2013	3424.54	46.88	NM	NA	3377.66
IW018	10/28/2013	3424.54	47.16	NM	NA	3377.38
IW018	05/05/2014	3424.54	47.24	NM	NA	3377.30
IW018	11/03/2014	3424.54	46.75	NM	NA	3377.79
IW018	05/05/2015	3424.54	46.44	NM	NA	3378.10
IW018	11/02/2015	3424.54	46.50	NM	NA	3378.04
IW018	05/11/2016	3424.54	46.22	NM	NA	3378.32
IW018	05/01/2017	3424.54	45.57	NM	NA	3378.97
IW019	01/17/2006	3423.78	45.13	NM	NA	3378.65
IW019	06/20/2006	3423.78	44.95	NM	NA	3378.83
IW019	04/06/2007	3423.78	44.85	NM	NA	3378.93
IW019	03/19/2008	3423.78	44.74	NM	NA	3379.04
IW019	03/10/2009	3423.78	45.23	NM	NA	3378.55
IW019	03/01/2010	3423.78	44.94	NM	NA	3378.84
IW019	08/02/2010	3423.78	45.32	NM	NA	3378.46
IW019	05/05/2011	3423.78	45.15	NM	NA	3378.63
IW019	11/04/2011	3423.78	45.42	NM	NA	3378.36
IW019	05/02/2012	3423.78	45.53	NM	NA	3378.25
IW019	10/24/2012	3423.78	45.91	NM	NA	3377.87
IW019	04/30/2013	3423.78	46.10	NM	NA	3377.68
IW019	10/28/2013	3423.78	46.50	NM	NA	3377.28
IW019	05/05/2014	3423.78	46.41	NM	NA	3377.37
IW019	11/03/2014	3423.78	45.93	NM	NA	3377.85
IW019	05/05/2015	3423.78	45.63	NM	NA	3378.15
IW019	11/02/2015	3423.78	45.68	NM	NA	3378.10
IW019	05/11/2016	3423.78	45.38	NM	NA	3378.40
IW019	09/15/2016	3423.78	45.35	NM	NA	3378.43
IW019	05/01/2017	3423.78	44.68	NM	NA	3379.10
IW019	09/18/2017	3423.78	44.78	NM	NA	3379.00
IW019	03/20/2018	3423.78	44.73	NM	NA	3379.05
IW019	09/10/2018	3423.78	44.28	NM	NA	3379.50
IW019	04/09/2019	3423.78	44.35	NM	NA	3379.43
IW019	10/07/2019	3423.78	44.57	NM	NA	3379.21
IW020	01/17/2006	3423.5	44.76	NM	NA	3378.74
IW020	06/20/2006	3423.5	44.55	NM	NA	3378.95
IW020	04/10/2007	3423.5	44.33	NM	NA	3379.17
IW020	04/09/2008	3423.5	44.33	NM	NA	3379.17
IW020	03/10/2009	3423.5	44.84	NM	NA	3378.66
IW020	03/01/2010	3423.5	44.75	NM	NA	3378.75
IW020	07/30/2010	3423.5	44.53	NM	NA	3378.97
IW020	05/05/2011	3423.5	44.81	NM	NA	3378.69
IW020	11/04/2011	3423.5	45.05	NM	NA	3378.45
IW020	05/02/2012	3423.5	45.09	NM	NA	3378.41
IW020	10/24/2012	3423.5	45.52	NM	NA	3377.98
IW020	04/30/2013	3423.5	45.70	NM	NA	3377.80
IW021	01/17/2006	3423.16	44.44	NM	NA	3378.72
IW021	06/20/2006	3423.16	44.15	NM	NA	3379.01
IW021	04/05/2007	3423.16	44.04	NM	NA	3379.12
IW021	03/19/2008	3423.16	43.91	NM	NA	3379.25
IW021	03/10/2009	3423.16	44.42	NM	NA	3378.74
IW021	03/01/2010	3423.16	44.75	NM	NA	3378.41
IW021	07/30/2010	3423.16	44.50	NM	NA	3378.66
IW021	05/05/2011	3423.16	44.44	NM	NA	3378.72
IW021	11/04/2011	3423.16	44.70	NM	NA	3378.46
IW021	05/02/2012	3423.16	44.67	NM	NA	3378.49
IW021	10/24/2012	3423.16	45.08	NM	NA	3378.08
IW021	04/30/2013	3423.16	45.30	NM	NA	3377.86
IW021	10/28/2013	3423.16	45.57	NM	NA	3377.59
IW021	05/05/2014	3423.16	45.61	NM	NA	3377.55
IW021	11/03/2014	3423.16	45.04	NM	NA	3378.12
IW021	05/05/2015	3423.16	44.80	NM	NA	3378.36
IW021	11/02/2015	3423.16	44.85	NM	NA	3378.31

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW021	05/11/2016	3423.16	44.58	NM	NA	3378.58
IW021	09/15/2016	3423.16	44.50	NM	NA	3378.66
IW021	05/01/2017	3423.16	43.82	NM	NA	3379.34
IW022	01/17/2006	3423.16	44.39	NM	NA	3378.77
IW022	06/20/2006	3423.16	44.10	NM	NA	3379.06
IW022	04/10/2007	3423.16	43.87	NM	NA	3379.29
IW022	04/09/2008	3423.16	43.83	NM	NA	3379.33
IW022	03/10/2009	3423.16	44.33	NM	NA	3378.83
IW022	03/01/2010	3423.16	44.43	NM	NA	3378.73
IW022	07/30/2010	3423.16	44.46	NM	NA	3378.70
IW022	05/05/2011	3423.16	44.35	NM	NA	3378.81
IW022	11/04/2011	3423.16	44.65	NM	NA	3378.51
IW022	05/02/2012	3423.16	44.66	NM	NA	3378.50
IW022	10/24/2012	3423.16	44.99	NM	NA	3378.17
IW022	04/30/2013	3423.16	45.21	NM	NA	3377.95
IW022	10/28/2013	3423.16	44.44	NM	NA	3378.72
IW022	05/05/2014	3423.16	45.52	NM	NA	3377.64
IW022	11/03/2014	3423.16	45.00	NM	NA	3378.16
IW022	05/05/2015	3423.16	44.71	NM	NA	3378.45
IW022	11/02/2015	3423.16	44.80	NM	NA	3378.36
IW022	05/11/2016	3423.16	44.49	NM	NA	3378.67
IW022	09/15/2016	3423.16	44.45	NM	NA	3378.71
IW022	05/01/2017	3423.16	43.77	NM	NA	3379.39
IW023	01/17/2006	3426.05	47.25	NM	NA	3378.80
IW023	06/20/2006	3426.05	41.82	NM	NA	3384.23
IW023	04/10/2007	3426.05	46.65	NM	NA	3379.40
IW023	03/21/2008	3426.05	46.76	NM	NA	3379.29
IW023	03/10/2009	3426.05	47.14	NM	NA	3378.91
IW023	07/28/2009	3426.05	47.33	NM	NA	3378.72
IW023	03/01/2010	3426.05	47.29	NM	NA	3378.76
IW023	07/30/2010	3426.05	47.27	NM	NA	3378.78
IW023	05/05/2011	3426.05	47.22	NM	NA	3378.83
IW023	11/04/2011	3426.05	47.49	NM	NA	3378.56
IW023	05/02/2012	3426.05	47.53	NM	NA	3378.52
IW023	10/24/2012	3426.05	47.80	NM	NA	3378.25
IW023	04/30/2013	3426.05	48.01	NM	NA	3378.04
IW023	10/28/2013	3426.05	48.25	NM	NA	3377.80
IW023	05/05/2014	3426.05	48.31	NM	NA	3377.74
IW023	11/03/2014	3426.05	47.80	NM	NA	3378.25
IW023	05/05/2015	3426.05	47.51	NM	NA	3378.54
IW023	11/02/2015	3426.05	47.55	NM	NA	3378.50
IW023	05/11/2016	3426.05	47.29	NM	NA	3378.76
IW023	09/15/2016	3426.05	47.37	NM	NA	3378.68
IW023	05/01/2017	3426.05	46.57	NM	NA	3379.48
IW023	09/18/2017	3426.05	46.61	NM	NA	3379.44
IW023	03/20/2018	3426.05	46.37	NM	NA	3379.68
IW023	09/14/2018	3426.05	46.6	NM	NA	3379.45
IW023	04/10/2019	3426.05	46.20	NM	NA	3379.85
IW023	10/07/2019	3426.05	46.52	NM	NA	3379.53
IW024	01/18/2006	3426.63	47.15	NM	NA	3379.48
IW024	06/20/2006	3426.63	47.10	NM	NA	3379.53
IW024	04/04/2007	3426.63	46.85	NM	NA	3379.78
IW024	03/21/2008	3426.63	47.70	NM	NA	3378.93
IW024	03/10/2009	3426.63	47.25	NM	NA	3379.38
IW024	07/28/2009	3426.63	47.45	NM	NA	3379.18
IW024	03/01/2010	3426.63	47.45	NM	NA	3379.18
IW024	08/02/2010	3426.63	47.47	NM	NA	3379.16
IW024	05/05/2011	3426.63	47.32	NM	NA	3379.31
IW024	11/04/2011	3426.63	47.79	NM	NA	3378.84
IW024	05/03/2012	3426.63	47.64	NM	NA	3378.99
IW024	10/23/2012	3426.63	48.02	NM	NA	3378.61
IW024	05/01/2013	3426.63	48.15	NM	NA	3378.48
IW024	10/29/2013	3426.63	48.37	NM	NA	3378.26
IW024	05/05/2014	3426.63	48.40	NM	NA	3378.23
IW024	11/03/2014	3426.63	47.96	NM	NA	3378.67
IW024	05/05/2015	3426.63	47.61	NM	NA	3379.02
IW024	11/02/2015	3426.63	47.65	NM	NA	3378.98
IW024	05/12/2016	3426.63	47.44	NM	NA	3379.19
IW024	09/14/2016	3426.63	47.37	NM	NA	3379.26
IW024	05/02/2017	3426.63	46.74	NM	NA	3379.89

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW024	03/20/2018	3426.63	46.47	NM	NA	3380.16
IW024	04/10/2019	3426.63	46.32	NM	NA	3380.31
IW024	10/07/2019	3426.63	46.65	NM	NA	3379.98
IW025	01/18/2006	3427.62	48.09	NM	NA	3379.53
IW025	06/20/2006	3427.62	47.95	NM	NA	3379.67
IW025	04/04/2007	3427.62	47.72	NM	NA	3379.90
IW025	03/21/2008	3427.62	48.10	NM	NA	3379.52
IW025	03/10/2009	3427.62	47.20	NM	NA	3380.42
IW025	07/28/2009	3427.62	48.44	NM	NA	3379.18
IW025	03/01/2010	3427.62	48.52	NM	NA	3379.10
IW025	08/02/2010	3427.62	48.53	NM	NA	3379.09
IW025	05/05/2011	3427.62	48.37	NM	NA	3379.25
IW025	11/04/2011	3427.62	48.63	NM	NA	3378.99
IW025	05/03/2012	3427.62	49.72	NM	NA	3377.90
IW025	10/23/2012	3427.62	49.01	NM	NA	3378.61
IW025	05/01/2013	3427.62	49.20	NM	NA	3378.42
IW025	10/29/2013	3427.62	49.42	NM	NA	3378.20
IW025	05/05/2014	3427.62	49.45	NM	NA	3378.17
IW025	11/03/2014	3427.62	49.00	NM	NA	3378.62
IW025	05/05/2015	3427.62	48.66	NM	NA	3378.96
IW025	11/02/2015	3427.62	48.67	NM	NA	3378.95
IW025	05/12/2016	3427.62	48.49	NM	NA	3379.13
IW025	09/14/2016	3427.62	48.40	NM	NA	3379.22
IW025	05/02/2017	3426.63	47.79	NM	NA	3378.84
IW026	01/18/2006	3428.01	48.42	NM	NA	3379.59
IW026	06/20/2006	3428.01	48.26	NM	NA	3379.75
IW026	04/04/2007	3428.01	48.10	NM	NA	3379.91
IW026	03/21/2008	3428.01	48.05	NM	NA	3379.96
IW026	03/10/2009	3428.01	48.58	NM	NA	3379.43
IW026	07/28/2009	3428.01	48.76	NM	NA	3379.25
IW026	03/01/2010	3428.01	48.23	NM	NA	3379.78
IW026	08/02/2010	3428.01	48.72	NM	NA	3379.29
IW026	05/05/2011	3428.01	48.65	NM	NA	3379.36
IW026	11/04/2011	3428.01	49.90	NM	NA	3378.11
IW026	05/03/2012	3428.01	49.00	NM	NA	3379.01
IW026	10/23/2012	3428.01	49.70	NM	NA	3378.31
IW026	05/01/2013	3428.01	49.41	NM	NA	3378.60
IW026	10/29/2013	3428.01	49.61	NM	NA	3378.40
IW026	05/05/2014	3428.01	49.64	NM	NA	3378.37
IW026	11/03/2014	3428.01	49.22	NM	NA	3378.79
IW026	05/05/2015	3428.01	48.90	NM	NA	3379.11
IW026	11/02/2015	3428.01	48.92	NM	NA	3379.09
IW026	05/12/2016	3428.01	48.64	NM	NA	3379.37
IW026	09/22/2016	3428.01	48.65	NM	NA	3379.36
IW026	05/02/2017	3428.01	47.96	NM	NA	3380.05
IW027	01/18/2006	3428.17	48.55	NM	NA	3379.62
IW027	06/20/2006	3428.17	48.33	NM	NA	3379.84
IW027	04/04/2007	3428.17	48.17	NM	NA	3380.00
IW027	03/21/2008	3428.17	48.10	NM	NA	3380.07
IW027	03/11/2009	3428.17	48.66	NM	NA	3379.51
IW027	03/01/2010	3428.17	48.78	NM	NA	3379.39
IW027	08/02/2010	3428.17	48.80	NM	NA	3379.37
IW027	05/05/2011	3428.17	48.65	NM	NA	3379.52
IW027	11/04/2011	3428.17	48.90	NM	NA	3379.27
IW027	05/03/2012	3428.17	49.00	NM	NA	3379.17
IW027	10/23/2012	3428.17	49.29	NM	NA	3378.88
IW027	05/01/2013	3428.17	49.45	NM	NA	3378.72
IW027	10/29/2013	3428.17	49.65	NM	NA	3378.52
IW027	05/05/2014	3428.17	49.69	NM	NA	3378.48
IW027	11/03/2014	3428.17	49.20	NM	NA	3378.97
IW027	05/05/2015	3428.17	48.87	NM	NA	3379.30
IW027	11/02/2015	3428.17	48.90	NM	NA	3379.27
IW027	05/12/2016	3428.17	48.68	NM	NA	3379.49
IW027	09/14/2016	3428.17	48.65	NM	NA	3379.52
IW027	05/02/2017	3428.17	48.01	NM	NA	3380.16
IW028	03/16/2005	3428.18	48.70	NM	NA	3379.48
IW028	05/23/2005	3428.18	49.09	NM	NA	3379.09
IW028	06/16/2005	3428.18	49.10	NM	NA	3379.08
IW028	01/17/2006	3428.18	48.53	NM	NA	3379.65
IW028	06/20/2006	3428.18	48.30	NM	NA	3379.88

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
IW028	04/04/2007	3428.18	48.09	NM	NA	3380.09
IW028	04/09/2008	3428.18	47.99	NM	NA	3380.19
IW028	03/11/2009	3428.18	48.51	NM	NA	3379.67
IW028	03/01/2010	3428.18	48.74	NM	NA	3379.44
IW028	08/02/2010	3428.18	48.76	NM	NA	3379.42
IW028	05/05/2011	3428.18	48.62	NM	NA	3379.56
IW028	11/04/2011	3428.18	48.82	NM	NA	3379.36
IW028	05/03/2012	3428.18	48.96	NM	NA	3379.22
IW028	10/23/2012	3428.18	49.21	NM	NA	3378.97
IW028	05/01/2013	3428.18	49.41	NM	NA	3378.77
IW028	10/29/2013	3428.18	49.60	NM	NA	3378.58
IW028	05/05/2014	3428.18	49.63	NM	NA	3378.55
IW028	11/03/2014	3428.18	49.15	NM	NA	3379.03
IW028	05/05/2015	3428.18	48.80	NM	NA	3379.38
IW028	11/02/2015	3428.18	48.84	NM	NA	3379.34
IW028	05/12/2016	3428.18	48.63	NM	NA	3379.55
IW028	09/14/2016	3428.18	48.60	NM	NA	3379.58
IW028	05/02/2017	3428.18	47.96	NM	NA	3380.22
IW029P	05/05/2014	3427.96	48.48	NM	NA	3379.48
IW029P	11/04/2014	3427.96	47.88	NM	NA	3380.08
IW029P	05/06/2015	3427.96	47.34	NM	NA	3380.62
IW029P	11/02/2015	3427.96	47.68	NM	NA	3380.28
IW029P	05/12/2016	3427.96	47.43	NM	NA	3380.53
IW029P	09/21/2016	3427.96	47.35	NM	NA	3380.61
IW029P	05/03/2017	3427.96	46.81	NM	NA	3381.15
IW030	10/23/2012	3427.96	48.88	NM	NA	3379.08
IW030	05/01/2013	3427.96	48.73	NM	NA	3379.23
IW030	10/29/2013	3427.96	49.25	NM	NA	3378.71
LordWW	12/18/1997	3419.97	44.00	NM	NA	3375.97
LordWW	11/16/1999	3419.97	42.67	NM	NA	3377.30
LordWW	06/07/2001	3419.97	41.90	NM	NA	3378.07
LordWW	02/06/2002	3419.97	42.01	NM	NA	3377.96
LordWW	09/03/2002	3419.97	41.88	NM	NA	3378.09
LordWW	12/09/2002	3419.97	41.88	NM	NA	3378.09
LordWW	06/05/2003	3419.97	41.95	NM	NA	3378.02
LordWW	01/22/2004	3419.97	42.25	NM	NA	3377.72
LordWW	03/30/2004	3419.97	42.34	NM	NA	3377.63
LordWW	06/07/2004	3419.97	42.12	NM	NA	3377.85
LordWW	09/17/2004	3419.97	41.93	NM	NA	3378.04
LordWW	05/23/2005	3419.97	40.93	NM	NA	3379.04
LordWW	01/17/2006	3419.97	40.59	NM	NA	3379.38
LordWW	06/23/2006	3419.97	40.57	NM	NA	3379.40
LordWW	04/05/2007	3419.97	40.05	NM	NA	3379.92
LordWW	03/18/2008	3419.97	48.17	NM	NA	3371.80
LordWW	08/04/2008	3419.97	40.43	NM	NA	3379.54
LordWW	03/10/2009	3419.97	40.61	NM	NA	3379.36
LordWW	07/28/2009	3419.97	40.80	NM	NA	3379.17
LordWW	03/01/2010	3419.97	40.84	NM	NA	3379.13
LordWW	08/02/2010	3419.97	38.21	NM	NA	3381.76
LordWW	10/26/2012	3419.97	41.38	NM	NA	3378.59
LordWW	05/23/2013	3419.97	41.47	NM	NA	3378.50
LordWW	11/05/2013	3419.97	39.17	NM	NA	3380.80
LordWW	11/04/2014	3419.97	41.20	NM	NA	3378.77
LordWW	11/09/2015	3419.97	40.94	NM	NA	3379.03
LordWW	05/10/2016	3419.97	40.66	NM	NA	3379.31
LordWW	09/22/2016	3419.97	40.65	NM	NA	3379.32
LordWW	05/03/2017	3419.97	39.96	NM	NA	3380.01
MW001	04/22/1997	3428.57	52.34	NM	NA	3376.23
MW001	12/18/1997	3428.57	52.32	NM	NA	3376.25
MW001	11/16/1999	3428.57	51.32	NM	NA	3377.25
MW001	05/15/2001	3428.57	50.33	NM	NA	3378.24
MW001	08/23/2001	3428.57	51.02	NM	NA	3377.55
MW001	01/21/2002	3428.57	50.64	NM	NA	3377.93
MW001	04/04/2002	3428.57	50.66	NM	NA	3377.91
MW001	09/03/2002	3428.57	50.44	NM	NA	3378.13
MW001	12/02/2002	3428.57	50.20	NM	NA	3378.37
MW001	01/31/2003	3428.57	50.36	NM	NA	3378.21
MW001	03/28/2003	3428.57	50.54	NM	NA	3378.03
MW001	05/19/2003	3428.57	50.36	NM	NA	3378.21
MW001	09/09/2003	3428.57	50.52	NM	NA	3378.05

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW001	01/26/2004	3428.57	50.73	NM	NA	3377.84
MW001	03/30/2004	3428.57	50.71	NM	NA	3377.86
MW001	06/07/2004	3428.57	50.76	NM	NA	3377.81
MW001	09/17/2004	3428.57	50.30	NM	NA	3378.27
MW001	11/30/2004	3428.57	49.90	NM	NA	3378.67
MW001	03/31/2005	3428.57	49.25	NM	NA	3379.32
MW001	05/23/2005	3428.57	49.15	NM	NA	3379.42
MW001	01/17/2006	3428.57	48.39	NM	NA	3380.18
MW001	06/19/2006	3428.57	48.02	NM	NA	3380.55
MW001	04/19/2007	3428.57	47.75	NM	NA	3380.82
MW001	03/24/2008	3428.57	47.83	NM	NA	3380.74
MW001	03/01/2010	3428.57	48.46	NM	NA	3380.11
MW001	08/03/2010	3428.57	48.51	NM	NA	3380.06
MW001	05/06/2011	3428.57	49.05	NM	NA	3379.52
MW001	11/01/2011	3428.57	48.47	NM	NA	3380.10
MW001	05/03/2012	3428.57	48.57	NM	NA	3380.00
MW001	10/23/2012	3428.57	48.75	NM	NA	3379.82
MW001	05/02/2013	3428.57	49.00	NM	NA	3379.57
MW001	05/05/2014	3428.57	49.07	NM	NA	3379.50
MW001	11/03/2014	3428.57	48.78	NM	NA	3379.79
MW001	05/06/2015	3428.57	48.51	NM	NA	3380.06
MW001	09/16/2015	3428.57	48.27	NM	NA	3380.30
MW001	11/03/2015	3428.57	48.47	NM	NA	3380.10
MW001	05/12/2016	3428.57	48.30	NM	NA	3380.27
MW001	05/03/2017	3428.57	47.79	NM	NA	3380.78
MW001	09/18/2017	3428.57	47.67	NM	NA	3380.90
MW001	03/20/2018	3428.57	47.53	NM	NA	3381.04
MW001	09/11/2018	3428.57	47.69	NM	NA	3380.88
MW001	04/10/2019	3428.57	47.30	NM	NA	3381.27
MW001	10/07/2019	3428.57	47.60	NM	NA	3380.97
MW002	04/22/1997	3432.17	55.95	NM	NA	3376.22
MW002	12/18/1997	3432.17	55.62	NM	NA	3376.55
MW002	11/16/1999	3432.17	54.97	NM	NA	3377.20
MW002	05/15/2001	3432.17	54.15	NM	NA	3378.02
MW002	08/23/2001	3432.17	54.12	NM	NA	3378.05
MW002	01/21/2002	3432.17	54.30	NM	NA	3377.87
MW002	04/04/2002	3432.17	54.31	NM	NA	3377.86
MW002	09/03/2002	3432.17	54.14	NM	NA	3378.03
MW002	12/02/2002	3432.17	53.88	NM	NA	3378.29
MW002	01/30/2003	3432.17	53.88	NM	NA	3378.29
MW002	03/28/2003	3432.17	54.16	NM	NA	3378.01
MW002	05/19/2003	3432.17	53.97	NM	NA	3378.20
MW002	09/09/2003	3432.17	54.05	NM	NA	3378.12
MW002	12/02/2003	3432.17	53.89	NM	NA	3378.28
MW002	03/30/2004	3432.17	54.11	NM	NA	3378.06
MW002	06/07/2004	3432.17	54.21	NM	NA	3377.96
MW002	09/17/2004	3432.17	53.94	NM	NA	3378.23
MW002	11/30/2004	3432.17	53.74	NM	NA	3378.43
MW002	03/31/2005	3432.17	53.37	NM	NA	3378.80
MW002	05/23/2005	3432.17	53.06	NM	NA	3379.11
MW002	01/16/2006	3432.17	52.62	NM	NA	3379.55
MW002	06/19/2006	3432.17	52.20	NM	NA	3379.97
MW002	04/12/2007	3432.17	51.78	NM	NA	3380.39
MW002	03/19/2008	3432.17	51.69	NM	NA	3380.48
MW002	03/11/2009	3432.17	51.94	NM	NA	3380.23
MW002	03/01/2010	3432.17	51.99	NM	NA	3380.18
MW002	08/02/2010	3432.17	52.03	NM	NA	3380.14
MW002	05/06/2011	3432.17	51.84	NM	NA	3380.33
MW002	11/02/2011	3432.17	51.89	NM	NA	3380.28
MW002	05/03/2012	3432.17	51.99	NM	NA	3380.18
MW002	10/24/2012	3432.17	52.12	NM	NA	3380.05
MW002	05/02/2013	3432.17	52.30	NM	NA	3379.87
MW002	10/29/2013	3432.17	52.30	NM	NA	3379.87
MW002	05/05/2014	3432.17	52.36	NM	NA	3379.81
MW002	11/04/2014	3432.17	52.31	NM	NA	3379.86
MW002	05/06/2015	3432.17	52.02	NM	NA	3380.15
MW002	11/03/2015	3432.17	51.95	NM	NA	3380.22
MW002	05/12/2016	3432.17	50.86	NM	NA	3381.31
MW002	09/22/2016	3432.17	51.83	NM	NA	3380.34
MW002	05/03/2017	3432.17	51.58	NM	NA	3380.59

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW002A	01/07/2003	3432.31	54.03	NM	NA	3378.28
MW002A	01/30/2003	3432.31	53.89	NM	NA	3378.42
MW002A	03/28/2003	3432.31	54.11	NM	NA	3378.20
MW002A	05/19/2003	3432.31	53.99	NM	NA	3378.32
MW002A	09/09/2003	3432.31	54.12	NM	NA	3378.19
MW002A	12/02/2003	3432.31	53.97	NM	NA	3378.34
MW002A	03/30/2004	3432.31	54.20	NM	NA	3378.11
MW002A	06/07/2004	3432.31	54.21	NM	NA	3378.10
MW002A	09/17/2004	3432.31	53.93	NM	NA	3378.38
MW002A	11/30/2004	3432.31	53.74	NM	NA	3378.57
MW002A	03/31/2005	3432.31	53.36	NM	NA	3378.95
MW002A	05/23/2005	3432.31	53.08	NM	NA	3379.23
MW002A	01/17/2006	3432.31	52.56	NM	NA	3379.75
MW002A	06/19/2006	3432.31	52.18	NM	NA	3380.13
MW002A	04/12/2007	3432.31	51.80	NM	NA	3380.51
MW002A	03/19/2008	3432.31	51.72	NM	NA	3380.59
MW002A	03/11/2009	3432.31	51.89	NM	NA	3380.42
MW002A	03/01/2010	3432.31	52.01	NM	NA	3380.30
MW002A	08/02/2010	3432.31	52.01	NM	NA	3380.30
MW002A	05/06/2011	3432.31	51.84	NM	NA	3380.47
MW002A	11/04/2011	3432.3	51.86	NM	NA	3380.44
MW002A	05/03/2012	3432.3	51.95	NM	NA	3380.35
MW002A	10/24/2012	3432.3	52.10	NM	NA	3380.20
MW002A	05/02/2013	3432.3	52.30	NM	NA	3380.00
MW002A	10/29/2013	3432.3	52.31	NM	NA	3379.99
MW002A	05/05/2014	3432.3	52.37	NM	NA	3379.93
MW002A	11/04/2014	3432.3	52.30	NM	NA	3380.00
MW002A	05/06/2015	3432.3	52.05	NM	NA	3380.25
MW002A	11/03/2015	3432.3	51.97	NM	NA	3380.33
MW002A	05/12/2016	3432.3	51.90	NM	NA	3380.40
MW002A	09/22/2016	3432.3	51.84	NM	NA	3380.46
MW002A	05/03/2017	3432.3	51.60	NM	NA	3380.70
MW002A	09/18/2017	3432.3	51.44	NM	NA	3380.86
MW002A	03/20/2018	3432.3	51.34	NM	NA	3380.96
MW002A	09/10/2018	3432.3	51.35	NM	NA	3380.95
MW002A	04/10/2019	3432.30	51.13	NM	NA	3381.17
MW002A	10/07/2019	3432.30	51.22	NM	NA	3381.08
MW003	04/22/1997	3428.27	49.79	NM	NA	3378.48
MW003	12/18/1997	3428.27	49.24	NM	NA	3379.03
MW003	11/16/1999	3428.27	50.49	NM	NA	3377.78
MW003	05/15/2001	3428.27	49.63	NM	NA	3378.64
MW003	08/23/2001	3428.27	49.99	NM	NA	3378.28
MW003	01/21/2002	3428.27	49.81	NM	NA	3378.46
MW003	04/04/2002	3428.27	49.92	NM	NA	3378.35
MW003	09/03/2002	3428.27	49.80	NM	NA	3378.47
MW003	12/02/2002	3428.27	49.51	NM	NA	3378.76
MW003	01/31/2003	3428.27	49.64	NM	NA	3378.63
MW003	03/28/2003	3428.27	49.61	NM	NA	3378.66
MW003	05/19/2003	3428.27	49.57	NM	NA	3378.70
MW003	09/09/2003	3428.27	49.64	NM	NA	3378.63
MW003	12/03/2003	3428.27	49.70	NM	NA	3378.57
MW003	03/30/2004	3428.27	49.78	NM	NA	3378.49
MW003	06/07/2004	3428.27	49.74	NM	NA	3378.53
MW003	09/17/2004	3428.27	49.38	NM	NA	3378.89
MW003	11/30/2004	3428.27	48.80	NM	NA	3379.47
MW003	03/31/2005	3428.27	48.40	NM	NA	3379.87
MW003	05/23/2005	3428.27	48.31	NM	NA	3379.96
MW003	01/17/2006	3428.27	47.79	NM	NA	3380.48
MW003	06/19/2006	3428.27	47.65	NM	NA	3380.62
MW003	04/16/2007	3428.27	47.23	NM	NA	3381.04
MW003	03/19/2008	3428.27	47.21	NM	NA	3381.06
MW003	03/11/2009	3428.27	47.73	NM	NA	3380.54
MW003	03/01/2010	3428.27	47.94	NM	NA	3380.33
MW003	08/03/2010	3428.27	48.00	NM	NA	3380.27
MW003	05/06/2011	3428.27	47.75	NM	NA	3380.52
MW003	11/01/2011	3428.27	47.90	NM	NA	3380.37
MW003	05/04/2012	3428.27	48.13	NM	NA	3380.14
MW003	10/23/2012	3428.27	48.33	NM	NA	3379.94
MW003	05/02/2013	3428.27	48.52	NM	NA	3379.75
MW003	10/29/2013	3428.27	48.61	NM	NA	3379.66

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW003	05/05/2014	3428.27	48.62	NM	NA	3379.65
MW003	11/04/2014	3428.27	47.91	NM	NA	3380.36
MW003	05/06/2015	3428.27	47.91	NM	NA	3380.36
MW003	11/02/2015	3428.27	47.90	NM	NA	3380.37
MW003	05/12/2016	3428.27	47.74	NM	NA	3380.53
MW003	09/21/2016	3428.27	47.50	NM	NA	3380.77
MW003	05/03/2017	3428.27	47.02	NM	NA	3381.25
MW004	04/22/1997	3423.38	48.24	NM	NA	3375.14
MW004	12/18/1997	3423.38	47.69	NM	NA	3375.69
MW004	11/16/1999	3423.38	46.76	NM	NA	3376.62
MW004	05/15/2001	3423.38	45.91	NM	NA	3377.47
MW004	08/23/2001	3423.38	46.12	NM	NA	3377.26
MW004	01/21/2002	3423.38	46.20	NM	NA	3377.18
MW004	04/04/2002	3423.38	46.27	NM	NA	3377.11
MW004	09/03/2002	3423.38	45.95	NM	NA	3377.43
MW004	12/02/2002	3423.38	45.85	NM	NA	3377.53
MW004	01/31/2003	3423.38	45.94	NM	NA	3377.44
MW004	03/28/2003	3423.38	45.96	NM	NA	3377.42
MW004	05/19/2003	3423.38	45.97	NM	NA	3377.41
MW004	09/09/2003	3423.38	46.14	NM	NA	3377.24
MW004	12/03/2003	3423.38	46.15	NM	NA	3377.23
MW004	03/30/2004	3423.38	46.24	NM	NA	3377.14
MW004	06/07/2004	3423.38	46.19	NM	NA	3377.19
MW004	09/17/2004	3423.38	45.90	NM	NA	3377.48
MW004	11/29/2004	3423.38	45.44	NM	NA	3377.94
MW004	03/31/2005	3423.38	42.85	NM	NA	3380.53
MW004	05/23/2005	3423.38	44.90	NM	NA	3378.48
MW004	01/18/2006	3423.38	44.17	NM	NA	3379.21
MW004	06/19/2006	3423.38	43.95	NM	NA	3379.43
MW004	04/17/2007	3423.38	43.76	NM	NA	3379.62
MW004	03/19/2008	3423.38	43.78	NM	NA	3379.60
MW004	03/11/2009	3423.38	44.33	NM	NA	3379.05
MW004	03/01/2010	3423.38	44.43	NM	NA	3378.95
MW004	08/02/2010	3423.38	44.38	NM	NA	3379.00
MW004	05/06/2011	3423.38	44.29	NM	NA	3379.09
MW004	11/01/2011	3423.38	44.52	NM	NA	3378.86
MW004	05/04/2012	3423.38	44.63	NM	NA	3378.75
MW004	10/23/2012	3423.38	44.94	NM	NA	3378.44
MW004	05/01/2013	3423.38	45.15	NM	NA	3378.23
MW004	10/29/2013	3423.38	45.35	NM	NA	3378.03
MW004	05/05/2014	3423.38	45.36	NM	NA	3378.02
MW004	11/03/2014	3423.38	44.87	NM	NA	3378.51
MW004	05/06/2015	3423.38	44.62	NM	NA	3378.76
MW004	11/02/2015	3423.38	44.60	NM	NA	3378.78
MW004	05/12/2016	3423.38	44.43	NM	NA	3378.95
MW004	09/14/2016	3423.38	44.36	NM	NA	3379.02
MW004	05/02/2017	3423.38	43.58	NM	NA	3379.80
MW004A	12/18/1997	3423.57	48.00	NM	NA	3375.57
MW004A	11/16/1999	3423.57	47.00	NM	NA	3376.57
MW004A	05/15/2001	3423.57	46.31	NM	NA	3377.26
MW004A	08/23/2001	3423.57	46.44	NM	NA	3377.13
MW004A	01/21/2002	3423.57	46.44	NM	NA	3377.13
MW004A	04/04/2002	3423.57	46.52	NM	NA	3377.05
MW004A	09/03/2002	3423.57	46.49	NM	NA	3377.08
MW004A	12/02/2002	3423.57	46.10	NM	NA	3377.47
MW004A	01/31/2003	3423.57	46.16	NM	NA	3377.41
MW004A	03/28/2003	3423.57	46.20	NM	NA	3377.37
MW004A	05/19/2003	3423.57	46.21	NM	NA	3377.36
MW004A	09/09/2003	3423.57	46.36	NM	NA	3377.21
MW004A	12/03/2003	3423.57	46.38	NM	NA	3377.19
MW004A	03/30/2004	3423.57	46.45	NM	NA	3377.12
MW004A	06/07/2004	3423.57	46.66	NM	NA	3376.91
MW004A	09/17/2004	3423.57	46.18	NM	NA	3377.39
MW004A	11/30/2004	3423.57	45.62	NM	NA	3377.95
MW004A	03/31/2005	3423.57	45.61	NM	NA	3377.96
MW004A	05/23/2005	3423.57	45.19	NM	NA	3378.38
MW004A	01/18/2006	3423.57	44.39	NM	NA	3379.18
MW004A	06/19/2006	3423.57	44.21	NM	NA	3379.36
MW004A	04/16/2007	3423.57	43.95	NM	NA	3379.62
MW004A	03/19/2008	3423.57	43.98	NM	NA	3379.59

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW004A	03/11/2009	3423.57	44.54	NM	NA	3379.03
MW004A	03/01/2010	3423.57	44.71	NM	NA	3378.86
MW004A	08/02/2010	3423.57	44.75	NM	NA	3378.82
MW004A	05/06/2011	3423.57	44.50	NM	NA	3379.07
MW004A	11/04/2011	3423.57	44.74	NM	NA	3378.83
MW004A	05/22/2012	3423.57	44.85	NM	NA	3378.72
MW004A	10/23/2012	3423.57	45.25	NM	NA	3378.32
MW004A	05/01/2013	3423.57	45.35	NM	NA	3378.22
MW004A	10/29/2013	3423.57	45.57	NM	NA	3378.00
MW004A	05/05/2014	3423.57	45.60	NM	NA	3377.97
MW004A	11/03/2014	3423.57	45.11	NM	NA	3378.46
MW004A	05/06/2015	3423.57	44.92	NM	NA	3378.65
MW004A	11/02/2015	3423.57	44.83	NM	NA	3378.74
MW004A	05/12/2016	3423.57	44.62	NM	NA	3378.95
MW004A	09/14/2016	3423.57	44.62	NM	NA	3378.95
MW004A	05/02/2017	3423.57	43.83	NM	NA	3379.74
MW004A	09/18/2017	3423.57	43.97	NM	NA	3379.60
MW004A	03/20/2018	3423.57	43.7	NM	NA	3379.87
MW004A	09/14/2018	3423.57	43.95	NM	NA	3379.62
MW004A	04/10/2019	3423.57	43.52	NM	NA	3380.05
MW004A	10/07/2019	3423.57	43.84	NM	NA	3379.73
MW005	04/22/1997	3424.77	49.30	NM	NA	3375.47
MW005	12/18/1997	3424.77	49.52	NM	NA	3375.25
MW005	11/16/1999	3424.77	48.14	NM	NA	3376.63
MW005	08/23/2001	3424.77	47.82	NM	NA	3376.95
MW005	01/21/2002	3424.77	47.80	NM	NA	3376.97
MW005	04/09/2002	3424.77	47.31	NM	NA	3377.46
MW005	04/10/2003	3424.77	47.27	NM	NA	3377.50
MW005	05/19/2003	3424.77	47.25	NM	NA	3377.52
MW005	09/08/2003	3424.77	49.22	NM	NA	3375.55
MW005	12/03/2003	3424.77	47.51	NM	NA	3377.26
MW005	03/30/2004	3424.77	47.56	NM	NA	3377.21
MW005	06/07/2004	3424.77	47.54	NM	NA	3377.23
MW005	09/17/2004	3424.77	47.18	NM	NA	3377.59
MW005	11/30/2004	3424.77	46.51	NM	NA	3378.26
MW005	04/01/2005	3424.77	46.26	NM	NA	3378.51
MW005	05/23/2005	3424.77	46.04	NM	NA	3378.73
MW005	01/18/2006	3424.77	45.30	NM	NA	3379.47
MW005	06/15/2006	3424.77	45.05	NM	NA	3379.72
MW005	04/19/2007	3424.77	44.82	NM	NA	3379.95
MW005	03/24/2008	3424.77	44.92	NM	NA	3379.85
MW005	03/11/2009	3424.77	45.49	NM	NA	3379.28
MW005	03/01/2010	3424.77	45.55	NM	NA	3379.22
MW005	08/03/2010	3424.77	45.56	NM	NA	3379.21
MW005	05/05/2011	3424.77	45.35	NM	NA	3379.42
MW005	11/01/2011	3424.77	45.13	NM	NA	3379.64
MW005	05/22/2012	3424.77	45.76	NM	NA	3379.01
MW005	10/25/2012	3424.77	48.64	NM	NA	3376.13
MW005	05/02/2013	3424.77	46.25	NM	NA	3378.52
MW005	10/29/2013	3424.77	46.35	NM	NA	3378.42
MW005*	05/03/2017	3424.77	12.95	NM	NA	3411.82
MW006	04/22/1997	3425.26	49.26	NM	NA	3376.00
MW006	12/18/1997	3425.26	49.69	NM	NA	3375.57
MW006	11/16/1999	3425.26	48.69	NM	NA	3376.57
MW006	05/15/2001	3425.26	49.48	NM	NA	3375.78
MW006	08/23/2001	3425.26	50.21	NM	NA	3375.05
MW006	01/21/2002	3425.26	50.11	NM	NA	3375.15
MW006	04/09/2002	3425.26	50.35	NM	NA	3374.91
MW006	09/11/2002	3425.26	49.55	NM	NA	3375.71
MW006	12/05/2002	3425.26	49.13	NM	NA	3376.13
MW006	04/10/2003	3425.26	49.61	NM	NA	3375.65
MW006	05/19/2003	3425.26	49.63	NM	NA	3375.63
MW006	09/08/2003	3425.26	49.22	NM	NA	3376.04
MW006	12/03/2003	3425.26	49.95	NM	NA	3375.31
MW006	03/30/2004	3425.26	50.63	NM	NA	3374.63
MW006	06/07/2004	3425.26	49.25	NM	NA	3376.01
MW006	09/17/2004	3425.26	48.75	NM	NA	3376.51
MW006	11/30/2004	3425.26	46.94	NM	NA	3378.32
MW006	04/01/2005	3425.26	46.70	NM	NA	3378.56
MW006	05/23/2005	3425.26	46.49	NM	NA	3378.77

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW006	01/18/2006	3425.26	45.74	NM	NA	3379.52
MW006	06/15/2006	3425.26	45.47	NM	NA	3379.79
MW006	04/23/2007	3425.26	45.25	NM	NA	3380.01
MW006	03/24/2008	3425.26	45.35	NM	NA	3379.91
MW006	03/11/2009	3425.26	45.90	NM	NA	3379.36
MW006	03/01/2010	3425.26	45.97	NM	NA	3379.29
MW006	08/03/2010	3425.26	48.97	NM	NA	3376.29
MW006	05/05/2011	3425.26	45.75	NM	NA	3379.51
MW006	11/02/2011	3425.26	45.55	NM	NA	3379.71
MW006	05/22/2012	3425.26	46.10	43.60	2.50	3381.04
MW006	10/25/2012	3425.26	46.09	NM	NA	3379.17
MW006	05/02/2013	3425.26	46.74	46.40	0.34	3378.78
MW006	10/29/2013	3425.26	49.74	46.44	3.30	3378.00
MW006	05/05/2014	3425.26	49.66	NM	NA	3375.60
MW006	11/03/2014	3425.26	46.08	42.53	3.55	3381.84
MW006	05/05/2015	3425.26	46.20	46.14	0.06	3379.11
MW006	09/16/2015	3425.26	46.03	NM	NA	3379.23
MW006	11/03/2015	3425.26	46.00	45.99	0.01	3379.27
MW006	05/08/2016	3425.26	46.10	45.95	0.15	3379.27
MW006	09/16/2016	3425.26	46.03	45.90	0.13	3379.33
MW006	05/03/2017	3425.26	45.33	45.21	0.12	3380.02
MW006	09/18/2017	3425.26	45.3	45.21	0.09	3380.03
MW006	03/20/2018	3425.26	44.98	NM	NA	3380.28
MW006	09/10/2018	3425.26	45.37	42.25	3.12	3382.23
MW006	04/10/2019	3425.26	44.89	44.79	0.10	3380.45
MW006	10/07/2019	3425.26	45.19	45.05	0.14	3380.18
MW007	12/18/1997	3428.39	49.43	NM	NA	3378.96
MW007	11/16/1999	3428.39	50.57	NM	NA	3377.82
MW007	05/15/2001	3428.39	49.70	NM	NA	3378.69
MW007	08/23/2001	3428.39	50.06	NM	NA	3378.33
MW007	01/21/2002	3428.39	49.93	NM	NA	3378.46
MW007	04/04/2002	3428.39	50.03	NM	NA	3378.36
MW007	09/03/2002	3428.39	49.90	NM	NA	3378.49
MW007	12/02/2002	3428.39	49.60	NM	NA	3378.79
MW007	01/31/2003	3428.39	49.71	NM	NA	3378.68
MW007	03/28/2003	3428.39	49.70	NM	NA	3378.69
MW007	05/19/2003	3428.39	49.60	NM	NA	3378.79
MW007	09/09/2003	3428.39	49.73	NM	NA	3378.66
MW007	12/03/2003	3428.39	49.71	NM	NA	3378.68
MW007	03/30/2004	3428.39	49.89	NM	NA	3378.50
MW007	06/07/2004	3428.39	49.82	NM	NA	3378.57
MW007	09/17/2004	3428.39	49.44	NM	NA	3378.95
MW007	11/30/2004	3428.39	48.90	NM	NA	3379.49
MW007	03/31/2005	3428.39	48.50	NM	NA	3379.89
MW007	05/23/2005	3428.39	48.41	NM	NA	3379.98
MW007	01/17/2006	3428.39	47.91	NM	NA	3380.48
MW007	06/19/2006	3428.39	47.75	NM	NA	3380.64
MW007	04/16/2007	3428.39	47.33	NM	NA	3381.06
MW007	03/19/2008	3428.39	47.35	NM	NA	3381.04
MW007	03/10/2009	3428.39	47.78	NM	NA	3380.61
MW007	03/01/2010	3428.39	48.09	NM	NA	3380.30
MW007	08/03/2010	3428.39	48.14	NM	NA	3380.25
MW007	05/06/2011	3428.39	47.90	NM	NA	3380.49
MW007	11/01/2011	3428.39	48.01	NM	NA	3380.38
MW007	05/04/2012	3428.39	48.25	NM	NA	3380.14
MW007	10/23/2012	3428.39	48.52	NM	NA	3379.87
MW007	05/02/2013	3428.39	48.70	NM	NA	3379.69
MW007	10/29/2013	3428.39	48.73	NM	NA	3379.66
MW007	05/05/2014	3428.39	48.76	NM	NA	3379.63
MW007	11/04/2014	3428.39	48.01	NM	NA	3380.38
MW007	05/06/2015	3428.39	48.05	NM	NA	3380.34
MW007	11/02/2015	3428.39	48.02	NM	NA	3380.37
MW007	05/12/2016	3428.39	47.89	NM	NA	3380.50
MW007	09/21/2016	3428.39	47.66	NM	NA	3380.73
MW007	05/03/2017	3428.39	47.22	NM	NA	3381.17
MW007A	12/18/1997	3428.13	49.37	NM	NA	3378.76
MW007A	11/16/1999	3428.13	50.22	NM	NA	3377.91
MW007A	05/15/2001	3428.13	49.38	NM	NA	3378.75
MW007A	08/23/2001	3428.13	49.72	NM	NA	3378.41
MW007A	01/21/2002	3428.13	49.64	NM	NA	3378.49

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW007A	04/04/2002	3428.13	49.74	NM	NA	3378.39
MW007A	09/03/2002	3428.13	49.60	NM	NA	3378.53
MW007A	12/02/2002	3428.13	49.32	NM	NA	3378.81
MW007A	01/31/2003	3428.13	49.43	NM	NA	3378.70
MW007A	03/28/2003	3428.13	49.43	NM	NA	3378.70
MW007A	05/19/2003	3428.13	49.37	NM	NA	3378.76
MW007A	09/09/2003	3428.13	49.43	NM	NA	3378.70
MW007A	12/03/2003	3428.13	49.49	NM	NA	3378.64
MW007A	03/30/2004	3428.13	49.60	NM	NA	3378.53
MW007A	06/07/2004	3428.13	49.53	NM	NA	3378.60
MW007A	09/17/2004	3428.13	49.22	NM	NA	3378.91
MW007A	01/17/2006	3428.13	47.66	NM	NA	3380.47
MW007A	06/19/2006	3428.13	47.50	NM	NA	3380.63
MW007A	04/16/2007	3428.13	47.11	NM	NA	3381.02
MW007A	03/19/2008	3428.13	47.12	NM	NA	3381.01
MW007A	03/11/2009	3428.13	47.64	NM	NA	3380.49
MW007A	03/01/2010	3428.13	47.85	NM	NA	3380.28
MW007A	08/03/2010	3428.13	47.89	NM	NA	3380.24
MW007A	05/06/2011	3428.13	47.68	NM	NA	3380.45
MW007A	11/04/2011	3428.13	47.63	NM	NA	3380.50
MW007A	05/04/2012	3428.13	48.02	NM	NA	3380.11
MW007A	10/23/2012	3428.13	48.23	NM	NA	3379.90
MW007A	05/02/2013	3428.13	48.44	NM	NA	3379.69
MW007A	10/29/2013	3428.13	48.51	NM	NA	3379.62
MW007A	05/05/2014	3428.13	48.56	NM	NA	3379.57
MW007A	11/04/2014	3428.13	47.96	NM	NA	3380.17
MW007A	05/06/2015	3428.13	47.86	NM	NA	3380.27
MW007A	11/02/2015	3428.13	47.81	NM	NA	3380.32
MW007A	05/12/2016	3428.13	47.71	NM	NA	3380.42
MW007A	09/22/2016	3428.13	47.50	NM	NA	3380.63
MW007A	05/03/2017	3428.13	47.04	NM	NA	3381.09
MW007A	09/18/2017	3428.13	46.88	NM	NA	3381.25
MW007A	03/20/2018	3428.13	46.73	NM	NA	3381.40
MW007A	09/14/2018	3428.13	47.13	NM	NA	3381.00
MW007A	04/10/2019	3428.13	46.58	NM	NA	3381.55
MW007A	10/07/2019	3428.13	46.86	NM	NA	3381.27
MW008	12/18/1997	3430.13	50.76	NM	NA	3379.37
MW008	11/16/1999	3430.13	52.25	NM	NA	3377.88
MW008	05/15/2001	3430.13	51.36	NM	NA	3378.77
MW008	08/23/2001	3430.13	51.72	NM	NA	3378.41
MW008	01/21/2002	3430.13	51.53	NM	NA	3378.60
MW008	04/04/2002	3430.13	51.60	NM	NA	3378.53
MW008	09/03/2002	3430.13	51.51	NM	NA	3378.62
MW008	12/02/2002	3430.13	51.27	NM	NA	3378.86
MW008	01/31/2003	3430.13	51.31	NM	NA	3378.82
MW008	03/28/2003	3430.13	51.31	NM	NA	3378.82
MW008	05/19/2003	3430.13	51.21	NM	NA	3378.92
MW008	09/09/2003	3430.13	51.33	NM	NA	3378.80
MW008	12/03/2003	3430.13	51.33	NM	NA	3378.80
MW008	03/30/2004	3430.13	51.40	NM	NA	3378.73
MW008	06/07/2004	3430.13	51.82	NM	NA	3378.31
MW008	11/30/2004	3430.13	50.64	NM	NA	3379.49
MW008	03/31/2005	3430.13	50.24	NM	NA	3379.89
MW008	05/23/2005	3430.13	50.14	NM	NA	3379.99
MW008	01/17/2006	3430.13	49.52	NM	NA	3380.61
MW008	06/19/2006	3430.13	49.37	NM	NA	3380.76
MW008	04/03/2007	3430.13	48.93	NM	NA	3381.20
MW008	03/24/2008	3430.13	48.80	NM	NA	3381.33
MW008	03/11/2009	3430.13	49.24	NM	NA	3380.89
MW008	03/01/2010	3430.13	49.52	NM	NA	3380.61
MW008	08/03/2010	3430.13	49.49	NM	NA	3380.64
MW008	05/06/2011	3430.13	49.30	NM	NA	3380.83
MW008	11/01/2011	3430.13	49.45	NM	NA	3380.68
MW008	05/04/2012	3430.13	49.58	NM	NA	3380.55
MW008	10/23/2012	3430.13	49.75	NM	NA	3380.38
MW008	05/02/2013	3430.13	49.93	NM	NA	3380.20
MW008	10/29/2013	3430.13	50.03	NM	NA	3380.10
MW008	05/05/2014	3430.13	50.10	NM	NA	3380.03
MW008	11/04/2014	3430.13	49.80	NM	NA	3380.33
MW008	05/06/2015	3430.13	49.48	NM	NA	3380.65

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW008	09/16/2015	3430.13	49.30	NM	NA	3380.83
MW008	05/12/2016	3430.13	49.36	NM	NA	3380.77
MW008	05/03/2017	3430.13	48.74	NM	NA	3381.39
MW008A	12/18/1997	3430.01	50.81	NM	NA	3379.20
MW008A	11/16/1999	3430.01	52.16	NM	NA	3377.85
MW008A	05/15/2001	3430.01	51.34	NM	NA	3378.67
MW008A	08/23/2001	3430.01	51.64	NM	NA	3378.37
MW008A	01/21/2002	3430.01	51.49	NM	NA	3378.52
MW008A	04/04/2002	3430.01	51.53	NM	NA	3378.48
MW008A	09/03/2002	3430.01	51.41	NM	NA	3378.60
MW008A	12/02/2002	3430.01	51.16	NM	NA	3378.85
MW008A	01/31/2003	3430.01	51.24	NM	NA	3378.77
MW008A	03/28/2003	3430.01	51.25	NM	NA	3378.76
MW008A	05/19/2003	3430.01	51.21	NM	NA	3378.80
MW008A	09/09/2003	3430.01	51.26	NM	NA	3378.75
MW008A	12/03/2003	3430.01	51.21	NM	NA	3378.80
MW008A	03/30/2004	3430.01	51.29	NM	NA	3378.72
MW008A	06/07/2004	3430.01	51.32	NM	NA	3378.69
MW008A	11/30/2004	3430.01	50.68	NM	NA	3379.33
MW008A	03/31/2005	3430.01	50.24	NM	NA	3379.77
MW008A	05/23/2005	3430.01	50.12	NM	NA	3379.89
MW008A	01/17/2006	3430.01	49.58	NM	NA	3380.43
MW008A	06/19/2006	3430.01	49.41	NM	NA	3380.60
MW008A	04/03/2007	3430.01	48.48	NM	NA	3381.53
MW008A	03/24/2008	3430.01	49.12	NM	NA	3380.89
MW008A	03/11/2009	3430.01	49.18	NM	NA	3380.83
MW008A	03/01/2010	3430.01	49.57	NM	NA	3380.44
MW008A	08/03/2010	3430.01	49.56	NM	NA	3380.45
MW008A	05/06/2011	3430.01	49.40	NM	NA	3380.61
MW008A	11/04/2011	3430.01	49.24	NM	NA	3380.77
MW008A	05/04/2012	3430.01	49.62	NM	NA	3380.39
MW008A	10/23/2012	3430.01	49.59	NM	NA	3380.42
MW008A	05/02/2013	3430.01	49.95	NM	NA	3380.06
MW008A	10/29/2013	3430.01	49.96	NM	NA	3380.05
MW008A	05/05/2014	3430.01	50.01	NM	NA	3380.00
MW008A	11/04/2014	3430.01	49.80	NM	NA	3380.21
MW008A	05/06/2015	3430.01	49.44	NM	NA	3380.57
MW008A	09/16/2015	3430.01	49.20	NM	NA	3380.81
MW008A	11/02/2015	3430.01	49.35	NM	NA	3380.66
MW008A	05/12/2016	3430.01	49.30	NM	NA	3380.71
MW008A	05/03/2017	3430.01	48.69	NM	NA	3381.32
MW008M	01/21/2002	3430.27	51.71	NM	NA	3378.56
MW008M	04/04/2002	3430.27	51.77	NM	NA	3378.50
MW008M	09/03/2002	3430.27	51.68	NM	NA	3378.59
MW008M	12/02/2002	3430.27	51.45	NM	NA	3378.82
MW008M	01/31/2003	3430.27	51.52	NM	NA	3378.75
MW008M	03/28/2003	3430.27	51.47	NM	NA	3378.80
MW008M	05/19/2003	3430.27	51.44	NM	NA	3378.83
MW008M	09/09/2003	3430.27	51.49	NM	NA	3378.78
MW008M	12/03/2003	3430.27	51.44	NM	NA	3378.83
MW008M	03/30/2004	3430.27	51.52	NM	NA	3378.75
MW008M	06/07/2004	3430.27	51.56	NM	NA	3378.71
MW008M	11/30/2004	3430.27	50.79	NM	NA	3379.48
MW008M	03/31/2005	3430.27	50.47	NM	NA	3379.80
MW008M	05/23/2005	3430.27	50.32	NM	NA	3379.95
MW008M	01/17/2006	3430.27	49.77	NM	NA	3380.50
MW008M	06/19/2006	3430.27	49.65	NM	NA	3380.62
MW008M	04/13/2007	3430.27	49.39	NM	NA	3380.88
MW008M	03/24/2008	3430.27	49.12	NM	NA	3381.15
MW008M	03/11/2009	3430.27	49.44	NM	NA	3380.83
MW008M	03/01/2010	3430.27	49.73	NM	NA	3380.54
MW008M	08/03/2010	3430.27	49.70	NM	NA	3380.57
MW008M	05/03/2011	3430.27	49.55	NM	NA	3380.72
MW008M	11/02/2011	3427.95	49.69	NM	NA	3378.26
MW008M	05/04/2012	3427.95	49.84	NM	NA	3378.11
MW008M	10/23/2012	3427.95	50.02	NM	NA	3377.93
MW008M	05/02/2013	3427.95	50.22	NM	NA	3377.73
MW008M	10/29/2013	3427.95	50.26	NM	NA	3377.69
MW008M	05/05/2014	3427.95	50.30	NM	NA	3377.65
MW008M	11/04/2014	3427.95	50.05	NM	NA	3377.90

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW008M	05/06/2015	3427.95	49.71	NM	NA	3378.24
MW008M	09/16/2015	3427.95	49.45	NM	NA	3378.50
MW008M	11/02/2015	3427.95	49.68	NM	NA	3378.27
MW008M	05/12/2016	3427.95	49.61	NM	NA	3378.34
MW008M	05/03/2017	3427.95	48.96	NM	NA	3378.99
MW008M	09/18/2017	3427.95	48.87	NM	NA	3379.08
MW008M	03/20/2018	3427.95	48.71	NM	NA	3379.24
MW008M	09/10/2018	3427.95	48.84	NM	NA	3379.11
MW008M	04/10/2019	3427.95	48.55	NM	NA	3379.40
MW008M	10/07/2019	3427.95	48.76	NM	NA	3379.19
MW009	12/18/1997	3427.63	48.98	NM	NA	3378.65
MW009	11/16/1999	3427.63	50.38	NM	NA	3377.25
MW009	05/15/2001	3427.63	49.59	NM	NA	3378.04
MW009	08/23/2001	3427.63	49.85	NM	NA	3377.78
MW009	01/21/2002	3427.63	49.82	NM	NA	3377.81
MW009	04/04/2002	3427.63	49.88	NM	NA	3377.75
MW009	09/03/2002	3427.63	49.75	NM	NA	3377.88
MW009	12/02/2002	3427.63	49.55	NM	NA	3378.08
MW009	01/31/2003	3427.63	49.60	NM	NA	3378.03
MW009	03/28/2003	3427.63	49.57	NM	NA	3378.06
MW009	05/19/2003	3427.63	49.53	NM	NA	3378.10
MW009	09/09/2003	3427.63	49.66	NM	NA	3377.97
MW009	12/03/2003	3427.63	49.66	NM	NA	3377.97
MW009	03/30/2004	3427.63	49.88	NM	NA	3377.75
MW009	06/07/2004	3427.63	49.77	NM	NA	3377.86
MW009	09/17/2004	3427.63	49.60	NM	NA	3378.03
MW009	11/30/2004	3427.63	49.00	NM	NA	3378.63
MW009	03/31/2005	3427.63	48.61	NM	NA	3379.02
MW009	05/23/2005	3427.63	48.47	NM	NA	3379.16
MW009	01/17/2006	3427.63	47.90	NM	NA	3379.73
MW009	06/19/2006	3427.63	47.75	NM	NA	3379.88
MW009	03/18/2008	3427.63	47.49	NM	NA	3380.14
MW009	03/11/2009	3427.63	47.91	NM	NA	3379.72
MW009	03/01/2010	3427.63	48.16	NM	NA	3379.47
MW009	08/02/2010	3427.63	48.06	NM	NA	3379.57
MW009	05/06/2011	3427.63	48.02	NM	NA	3379.61
MW009	11/01/2011	3427.63	48.24	NM	NA	3379.39
MW009	05/03/2012	3427.63	48.35	NM	NA	3379.28
MW009	10/23/2012	3427.63	48.60	NM	NA	3379.03
MW009	05/01/2013	3427.63	48.81	NM	NA	3378.82
MW009	10/29/2013	3427.63	48.95	NM	NA	3378.68
MW009	05/05/2014	3427.63	49.03	NM	NA	3378.60
MW009	11/03/2014	3427.63	48.50	NM	NA	3379.13
MW009	05/05/2015	3427.63	48.21	NM	NA	3379.42
MW009	11/02/2015	3427.63	48.21	NM	NA	3379.42
MW009	05/12/2016	3427.63	47.99	NM	NA	3379.64
MW009	09/14/2016	3427.63	47.92	NM	NA	3379.71
MW009	05/02/2017	3427.63	47.37	NM	NA	3380.26
MW009A	12/18/1997	3427.48	49.03	NM	NA	3378.45
MW009A	11/16/1999	3427.48	50.22	NM	NA	3377.26
MW009A	05/15/2001	3427.48	49.42	NM	NA	3378.06
MW009A	08/23/2001	3427.48	49.64	NM	NA	3377.84
MW009A	01/21/2002	3427.48	49.68	NM	NA	3377.80
MW009A	04/04/2002	3427.48	49.78	NM	NA	3377.70
MW009A	09/03/2002	3427.48	49.55	NM	NA	3377.93
MW009A	12/02/2002	3427.48	49.40	NM	NA	3378.08
MW009A	01/31/2003	3427.48	49.45	NM	NA	3378.03
MW009A	03/28/2003	3427.48	49.44	NM	NA	3378.04
MW009A	05/19/2003	3427.48	49.43	NM	NA	3378.05
MW009A	09/09/2003	3427.48	49.52	NM	NA	3377.96
MW009A	12/03/2003	3427.48	49.63	NM	NA	3377.85
MW009A	03/30/2004	3427.48	49.73	NM	NA	3377.75
MW009A	06/07/2004	3427.48	49.65	NM	NA	3377.83
MW009A	09/17/2004	3427.48	49.48	NM	NA	3378.00
MW009A	11/30/2004	3427.48	48.91	NM	NA	3378.57
MW009A	03/31/2005	3427.48	48.42	NM	NA	3379.06
MW009A	05/23/2005	3427.48	48.33	NM	NA	3379.15
MW009A	01/17/2006	3427.48	47.73	NM	NA	3379.75
MW009A	06/19/2006	3427.48	47.52	NM	NA	3379.96
MW009A	04/04/2007	3427.48	47.31	NM	NA	3380.17

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW009A	03/19/2008	3427.48	47.29	NM	NA	3380.19
MW009A	03/11/2009	3427.48	47.73	NM	NA	3379.75
MW009A	03/01/2010	3427.48	47.96	NM	NA	3379.52
MW009A	08/02/2010	3427.48	47.97	NM	NA	3379.51
MW009A	05/06/2011	3427.48	47.81	NM	NA	3379.67
MW009A	11/04/2011	3427.48	48.02	NM	NA	3379.46
MW009A	05/03/2012	3427.48	48.16	NM	NA	3379.32
MW009A	10/23/2012	3427.48	48.40	NM	NA	3379.08
MW009A	05/01/2013	3427.48	48.58	NM	NA	3378.90
MW009A	10/29/2013	3427.48	48.76	NM	NA	3378.72
MW009A	05/05/2014	3427.48	48.81	NM	NA	3378.67
MW009A	11/03/2014	3427.48	48.31	NM	NA	3379.17
MW009A	05/05/2015	3427.48	48.00	NM	NA	3379.48
MW009A	11/02/2015	3427.48	48.01	NM	NA	3379.47
MW009A	05/12/2016	3427.48	47.85	NM	NA	3379.63
MW009A	09/14/2016	3427.48	47.80	NM	NA	3379.68
MW009A	05/02/2017	3427.48	47.14	NM	NA	3380.34
MW010	12/18/1997	3419.42	43.22	NM	NA	3376.20
MW010	11/16/1999	3419.42	41.27	NM	NA	3378.15
MW010	05/15/2001	3419.42	40.37	NM	NA	3379.05
MW010	08/23/2001	3419.42	40.61	NM	NA	3378.81
MW010	01/21/2002	3419.42	40.71	NM	NA	3378.71
MW010	04/04/2002	3419.42	40.85	NM	NA	3378.57
MW010	09/03/2002	3419.42	40.65	NM	NA	3378.77
MW010	12/02/2002	3419.42	40.50	NM	NA	3378.92
MW010	01/30/2003	3419.42	40.51	NM	NA	3378.91
MW010	03/28/2003	3419.42	40.46	NM	NA	3378.96
MW010	05/19/2003	3419.42	40.52	NM	NA	3378.90
MW010	09/09/2003	3419.42	40.52	NM	NA	3378.90
MW010	12/07/2003	3419.42	40.59	NM	NA	3378.83
MW010	03/30/2004	3419.42	40.81	NM	NA	3378.61
MW010	06/07/2004	3419.42	40.74	NM	NA	3378.68
MW010	09/17/2004	3419.42	40.50	NM	NA	3378.92
MW010	11/30/2004	3419.42	40.11	NM	NA	3379.31
MW010	03/31/2005	3419.42	39.63	NM	NA	3379.79
MW010	05/23/2005	3419.42	39.42	NM	NA	3380.00
MW010	01/16/2006	3419.42	39.15	NM	NA	3380.27
MW010	06/16/2006	3419.42	38.97	NM	NA	3380.45
MW010	04/11/2007	3419.42	38.57	NM	NA	3380.85
MW010	03/19/2008	3419.42	39.14	NM	NA	3380.28
MW010	08/04/2008	3419.42	38.94	NM	NA	3380.48
MW010	03/11/2009	3419.42	39.16	NM	NA	3380.26
MW010	07/29/2009	3419.42	39.31	NM	NA	3380.11
MW010	03/01/2010	3419.42	39.40	NM	NA	3380.02
MW010	08/02/2010	3419.42	39.36	NM	NA	3380.06
MW010	05/03/2011	3419.42	93.36	NM	NA	3326.06
MW010	11/01/2011	3419.42	49.50	NM	NA	3369.92
MW010	05/01/2012	3419.42	39.51	NM	NA	3379.91
MW010	10/24/2012	3419.42	39.77	NM	NA	3379.65
MW010	05/01/2013	3419.42	39.91	NM	NA	3379.51
MW010	10/28/2013	3419.42	40.06	NM	NA	3379.36
MW010	05/05/2014	3419.42	40.15	NM	NA	3379.27
MW010	11/03/2014	3419.42	39.62	NM	NA	3379.80
MW010	05/06/2015	3419.42	39.40	NM	NA	3380.02
MW010	11/02/2015	3419.42	39.40	NM	NA	3380.02
MW010	05/10/2016	3419.42	39.14	NM	NA	3380.28
MW010	09/22/2016	3419.42	39.10	NM	NA	3380.32
MW010	05/02/2017	3419.42	38.44	NM	NA	3380.98
MW010	09/18/2017	3419.42	38.34	NM	NA	3381.08
MW010	03/20/2018	3419.42	38.00	NM	NA	3381.42
MW010	09/13/2018	3419.42	38.72	NM	NA	3380.70
MW010	04/10/2019	3419.42	37.99	NM	NA	3381.43
MW010	10/07/2019	3419.42	38.30	NM	NA	3381.12
MW011	11/16/1999	3431.49	53.58	NM	NA	3377.91
MW011	05/15/2001	3431.49	52.78	NM	NA	3378.71
MW011	08/23/2001	3431.49	52.96	NM	NA	3378.53
MW011	01/21/2002	3431.49	52.84	NM	NA	3378.65
MW011	04/04/2002	3431.49	52.89	NM	NA	3378.60
MW011	09/03/2002	3431.49	52.80	NM	NA	3378.69
MW011	12/02/2002	3431.49	52.56	NM	NA	3378.93

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW011	01/30/2003	3431.49	52.51	NM	NA	3378.98
MW011	03/28/2003	3431.49	52.63	NM	NA	3378.86
MW011	05/19/2003	3431.49	52.58	NM	NA	3378.91
MW011	09/09/2003	3431.49	52.60	NM	NA	3378.89
MW011	12/03/2003	3431.49	52.52	NM	NA	3378.97
MW011	03/30/2004	3431.49	52.56	NM	NA	3378.93
MW011	06/07/2004	3431.49	52.61	NM	NA	3378.88
MW011	11/30/2004	3431.49	52.16	NM	NA	3379.33
MW011	03/31/2005	3431.49	52.82	NM	NA	3378.67
MW011	05/23/2005	3431.49	51.58	NM	NA	3379.91
MW011	01/16/2006	3431.49	51.16	NM	NA	3380.33
MW011	06/19/2006	3431.49	50.92	NM	NA	3380.57
MW011	03/29/2007	3431.49	50.57	NM	NA	3380.92
MW011	03/24/2008	3431.49	50.30	NM	NA	3381.19
MW011	03/11/2009	3431.49	50.53	NM	NA	3380.96
MW011	03/01/2010	3431.49	50.76	NM	NA	3380.73
MW011	08/03/2010	3431.49	50.81	NM	NA	3380.68
MW011	05/06/2011	3431.49	50.60	NM	NA	3380.89
MW011	11/02/2011	3431.49	50.71	NM	NA	3380.78
MW011	05/03/2012	3431.49	50.80	NM	NA	3380.69
MW011	10/23/2012	3431.49	50.91	NM	NA	3380.58
MW011	05/02/2013	3431.49	51.12	NM	NA	3380.37
MW011	10/29/2013	3431.49	51.13	NM	NA	3380.36
MW011	05/05/2014	3431.49	51.25	NM	NA	3380.24
MW011	11/03/2014	3431.49	50.75	NM	NA	3380.74
MW011	05/06/2015	3431.49	50.76	NM	NA	3380.73
MW011	09/16/2015	3431.49	50.80	NM	NA	3380.69
MW011	11/02/2015	3431.49	50.70	NM	NA	3380.79
MW011	05/12/2016	3431.49	50.71	NM	NA	3380.78
MW011	05/03/2017	3431.49	50.16	NM	NA	3381.33
MW011A	12/18/1997	3431.77	51.49	NM	NA	3380.28
MW011A	11/16/1999	3431.77	53.49	NM	NA	3378.28
MW011A	05/15/2001	3431.77	53.07	NM	NA	3378.70
MW011A	08/23/2001	3431.77	53.20	NM	NA	3378.57
MW011A	01/21/2002	3431.77	53.04	NM	NA	3378.73
MW011A	04/04/2002	3431.77	53.13	NM	NA	3378.64
MW011A	09/03/2002	3431.77	53.01	NM	NA	3378.76
MW011A	12/02/2002	3431.77	52.76	NM	NA	3379.01
MW011A	01/30/2003	3431.77	52.72	NM	NA	3379.05
MW011A	03/28/2003	3431.77	52.85	NM	NA	3378.92
MW011A	05/19/2003	3431.77	52.78	NM	NA	3378.99
MW011A	09/09/2003	3431.77	52.82	NM	NA	3378.95
MW011A	12/03/2003	3431.77	52.83	NM	NA	3378.94
MW011A	03/30/2004	3431.77	53.04	NM	NA	3378.73
MW011A	06/07/2004	3431.77	53.03	NM	NA	3378.74
MW011A	11/30/2004	3431.77	53.03	NM	NA	3378.74
MW011A	03/31/2005	3431.77	52.18	NM	NA	3379.59
MW011A	05/23/2005	3431.77	51.94	NM	NA	3379.83
MW011A	01/16/2006	3431.77	51.45	NM	NA	3380.32
MW011A	06/19/2006	3431.77	51.25	NM	NA	3380.52
MW011A	03/29/2007	3431.77	50.88	NM	NA	3380.89
MW011A	03/24/2008	3431.77	50.69	NM	NA	3381.08
MW011A	03/11/2009	3431.77	50.94	NM	NA	3380.83
MW011A	03/01/2010	3431.77	51.17	NM	NA	3380.60
MW011A	08/03/2010	3431.77	51.21	NM	NA	3380.56
MW011A	05/06/2011	3431.77	51.02	NM	NA	3380.75
MW011A	11/04/2011	3431.77	51.30	NM	NA	3380.47
MW011A	05/03/2012	3431.77	51.21	NM	NA	3380.56
MW011A	10/23/2012	3431.77	51.36	NM	NA	3380.41
MW011A	05/01/2013	3431.77	51.60	NM	NA	3380.17
MW011A	10/29/2013	3431.77	51.56	NM	NA	3380.21
MW011A	05/05/2014	3431.77	51.65	NM	NA	3380.12
MW011A	11/03/2014	3431.77	51.41	NM	NA	3380.36
MW011A	05/06/2015	3431.77	51.22	NM	NA	3380.55
MW011A	09/16/2015	3431.77	50.93	NM	NA	3380.84
MW011A	11/02/2015	3431.77	51.06	NM	NA	3380.71
MW011A	05/12/2016	3431.77	51.09	NM	NA	3380.68
MW011A	05/03/2017	3431.77	50.51	NM	NA	3381.26
MW011A	09/18/2017	3431.77	50.38	NM	NA	3381.39
MW011A	03/20/2018	3431.77	50.25	NM	NA	3381.52

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW011A	09/10/2018	3431.77	50.21	NM	NA	3381.56
MW011A	04/10/2019	3431.77	49.91	NM	NA	3381.86
MW011A	10/07/2019	3431.77	50.11	NM	NA	3381.66
MW011M	01/21/2002	3431.21	52.68	NM	NA	3378.53
MW011M	04/04/2002	3431.21	52.63	NM	NA	3378.58
MW011M	09/03/2002	3431.21	52.54	NM	NA	3378.67
MW011M	12/02/2002	3431.21	52.32	NM	NA	3378.89
MW011M	01/30/2003	3431.21	52.25	NM	NA	3378.96
MW011M	03/28/2003	3431.21	52.32	NM	NA	3378.89
MW011M	05/19/2003	3431.21	52.31	NM	NA	3378.90
MW011M	09/09/2003	3431.21	52.30	NM	NA	3378.91
MW011M	12/03/2003	3431.21	52.25	NM	NA	3378.96
MW011M	03/30/2004	3431.21	52.31	NM	NA	3378.90
MW011M	06/07/2004	3431.21	52.34	NM	NA	3378.87
MW011M	11/30/2004	3431.21	51.91	NM	NA	3379.30
MW011M	03/31/2005	3431.21	52.62	NM	NA	3378.59
MW011M	05/23/2005	3431.21	51.38	NM	NA	3379.83
MW011M	01/16/2006	3431.21	50.90	NM	NA	3380.31
MW011M	06/19/2006	3431.21	50.65	NM	NA	3380.56
MW011M	03/29/2007	3431.21	50.15	NM	NA	3381.06
MW011M	03/24/2008	3431.21	49.97	NM	NA	3381.24
MW011M	03/11/2009	3431.21	50.21	NM	NA	3381.00
MW011M	03/01/2010	3431.21	50.59	NM	NA	3380.62
MW011M	08/03/2010	3431.21	50.56	NM	NA	3380.65
MW011M	05/06/2011	3431.21	50.33	NM	NA	3380.88
MW011M	11/01/2011	3431.21	50.47	NM	NA	3380.74
MW011M	05/03/2012	3431.21	50.54	NM	NA	3380.67
MW011M	10/23/2012	3431.21	50.68	NM	NA	3380.53
MW011M	05/02/2013	3431.21	50.88	NM	NA	3380.33
MW011M	10/29/2013	3431.21	50.87	NM	NA	3380.34
MW011M	05/05/2014	3431.21	50.98	NM	NA	3380.23
MW011M	05/06/2015	3431.21	50.56	NM	NA	3380.65
MW011M	09/16/2015	3431.21	48.25	NM	NA	3382.96
MW011M	11/02/2015	3431.21	50.45	NM	NA	3380.76
MW011M	05/12/2016	3431.21	48.34	NM	NA	3382.87
MW011M	05/03/2017	3431.21	47.81	NM	NA	3383.40
MW012	11/16/1999	3429.51	51.12	NM	NA	3378.39
MW012	05/15/2001	3429.51	50.50	NM	NA	3379.01
MW012	08/23/2001	3429.51	50.50	NM	NA	3379.01
MW012	01/21/2002	3429.51	50.48	NM	NA	3379.03
MW012	04/05/2002	3429.51	50.49	NM	NA	3379.02
MW012	09/03/2002	3429.51	50.40	NM	NA	3379.11
MW012	12/02/2002	3429.51	50.25	NM	NA	3379.26
MW012	01/30/2003	3429.51	50.13	NM	NA	3379.38
MW012	03/28/2003	3429.51	50.25	NM	NA	3379.26
MW012	05/19/2003	3429.51	50.15	NM	NA	3379.36
MW012	09/09/2003	3429.51	50.11	NM	NA	3379.40
MW012	12/03/2003	3429.51	50.05	NM	NA	3379.46
MW012	03/30/2004	3429.51	50.18	NM	NA	3379.33
MW012	06/07/2004	3429.51	50.13	NM	NA	3379.38
MW012	11/30/2004	3429.51	49.66	NM	NA	3379.85
MW012	03/31/2005	3429.51	49.58	NM	NA	3379.93
MW012	05/23/2005	3429.51	49.23	NM	NA	3380.28
MW012	01/16/2006	3429.51	48.88	NM	NA	3380.63
MW012	06/19/2006	3429.51	48.65	NM	NA	3380.86
MW012	04/02/2007	3429.51	48.21	NM	NA	3381.30
MW012	03/21/2008	3429.51	47.70	NM	NA	3381.81
MW012	03/11/2009	3429.51	48.26	NM	NA	3381.25
MW012	03/01/2010	3429.51	48.56	NM	NA	3380.95
MW012	08/03/2010	3429.51	48.62	NM	NA	3380.89
MW012	05/06/2011	3429.51	48.87	NM	NA	3380.64
MW012	11/02/2011	3429.51	48.47	NM	NA	3381.04
MW012	05/03/2012	3429.51	48.57	NM	NA	3380.94
MW012	10/24/2012	3429.51	48.65	NM	NA	3380.86
MW012	05/01/2013	3429.51	48.81	NM	NA	3380.70
MW012	10/29/2013	3429.51	48.89	NM	NA	3380.62
MW012	05/05/2014	3429.51	48.96	NM	NA	3380.55
MW012	11/03/2014	3429.51	48.81	NM	NA	3380.70
MW012	05/06/2015	3429.51	48.56	NM	NA	3380.95
MW012	09/16/2015	3429.51	48.36	NM	NA	3381.15

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW012	11/02/2015	3429.51	48.48	NM	NA	3381.03
MW012	05/09/2016	3429.51	48.31	NM	NA	3381.20
MW012	05/02/2017	3429.51	47.88	NM	NA	3381.63
MW012A	12/18/1997	3429.92	49.73	NM	NA	3380.19
MW012A	11/16/1999	3429.92	51.50	NM	NA	3378.42
MW012A	05/15/2001	3429.92	50.83	NM	NA	3379.09
MW012A	08/23/2001	3429.92	50.89	NM	NA	3379.03
MW012A	01/21/2002	3429.92	50.84	NM	NA	3379.08
MW012A	04/05/2002	3429.92	50.90	NM	NA	3379.02
MW012A	09/03/2002	3429.92	50.80	NM	NA	3379.12
MW012A	12/02/2002	3429.92	50.65	NM	NA	3379.27
MW012A	01/30/2003	3429.92	50.55	NM	NA	3379.37
MW012A	03/28/2003	3429.92	50.66	NM	NA	3379.26
MW012A	05/19/2003	3429.92	50.63	NM	NA	3379.29
MW012A	09/09/2003	3429.92	50.52	NM	NA	3379.40
MW012A	12/03/2003	3429.92	50.51	NM	NA	3379.41
MW012A	03/30/2004	3429.92	50.67	NM	NA	3379.25
MW012A	06/07/2004	3429.92	50.52	NM	NA	3379.40
MW012A	11/30/2004	3429.92	50.28	NM	NA	3379.64
MW012A	03/31/2005	3429.92	49.97	NM	NA	3379.95
MW012A	05/23/2005	3429.92	49.77	NM	NA	3380.15
MW012A	01/16/2006	3429.92	49.13	NM	NA	3380.79
MW012A	06/19/2006	3429.92	49.00	NM	NA	3380.92
MW012A	04/02/2007	3429.92	48.35	NM	NA	3381.57
MW012A	03/21/2008	3429.92	48.37	NM	NA	3381.55
MW012A	03/11/2009	3429.92	48.65	NM	NA	3381.27
MW012A	03/01/2010	3429.92	48.93	NM	NA	3380.99
MW012A	08/03/2010	3429.92	48.99	NM	NA	3380.93
MW012A	05/06/2011	3429.92	48.87	NM	NA	3381.05
MW012A	11/04/2011	3429.92	48.81	NM	NA	3381.11
MW012A	05/03/2012	3429.92	49.00	NM	NA	3380.92
MW012A	05/01/2013	3429.92	49.22	NM	NA	3380.70
MW012A	10/29/2013	3429.92	49.31	NM	NA	3380.61
MW012A	05/05/2014	3429.92	49.39	NM	NA	3380.53
MW012A	11/03/2014	3429.92	49.22	NM	NA	3380.70
MW012A	05/06/2015	3429.92	48.95	NM	NA	3380.97
MW012A	09/16/2015	3429.92	48.71	NM	NA	3381.21
MW012A	11/02/2015	3429.92	48.84	NM	NA	3381.08
MW012A	05/09/2016	3429.92	48.70	NM	NA	3381.22
MW012A	05/02/2017	3429.92	48.26	NM	NA	3381.66
MW012M	01/21/2002	3430.06	50.95	NM	NA	3379.11
MW012M	04/05/2002	3430.06	51.37	NM	NA	3378.69
MW012M	09/03/2002	3430.06	50.89	NM	NA	3379.17
MW012M	12/02/2002	3430.06	50.75	NM	NA	3379.31
MW012M	01/30/2003	3430.06	50.65	NM	NA	3379.41
MW012M	03/28/2003	3430.06	50.76	NM	NA	3379.30
MW012M	05/19/2003	3430.06	50.71	NM	NA	3379.35
MW012M	09/09/2003	3430.06	50.63	NM	NA	3379.43
MW012M	12/03/2003	3430.06	50.63	NM	NA	3379.43
MW012M	03/30/2004	3430.06	50.70	NM	NA	3379.36
MW012M	06/07/2004	3430.06	50.32	NM	NA	3379.74
MW012M	11/30/2004	3430.06	50.30	NM	NA	3379.76
MW012M	03/31/2005	3430.06	50.19	NM	NA	3379.87
MW012M	05/23/2005	3430.06	49.64	NM	NA	3380.42
MW012M	01/16/2006	3430.06	49.50	NM	NA	3380.56
MW012M	06/19/2006	3430.06	48.41	NM	NA	3381.65
MW012M	04/05/2007	3430.06	49.10	NM	NA	3380.96
MW012M	03/21/2008	3430.06	48.79	NM	NA	3381.27
MW012M	03/11/2009	3430.06	48.90	NM	NA	3381.16
MW012M	03/01/2010	3430.06	49.62	NM	NA	3380.44
MW012M	08/03/2010	3430.06	49.26	NM	NA	3380.80
MW012M	05/04/2011	3430.06	49.11	NM	NA	3380.95
MW012M	11/02/2011	3430.06	49.06	NM	NA	3381.00
MW012M	05/03/2012	3430.06	49.18	NM	NA	3380.88
MW012M	10/24/2012	3430.06	49.28	NM	NA	3380.78
MW012M	05/01/2013	3430.06	49.46	NM	NA	3380.60
MW012M	10/29/2013	3430.06	49.46	NM	NA	3380.60
MW012M	05/05/2014	3430.06	49.60	NM	NA	3380.46
MW012M	11/03/2014	3430.06	49.44	NM	NA	3380.62
MW012M	05/06/2015	3430.06	49.16	NM	NA	3380.90

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW012M	09/16/2015	3430.06	48.94	NM	NA	3381.12
MW012M	11/02/2015	3430.06	49.05	NM	NA	3381.01
MW012M	05/09/2016	3430.06	48.87	NM	NA	3381.19
MW012M	05/02/2017	3430.06	48.15	NM	NA	3381.91
MW012M	03/20/2018	3430.06	48.17	NM	NA	3381.89
MW012M	04/10/2019	3430.06	47.92	NM	NA	3382.14
MW013	12/18/1997	3424.11	46.98	NM	NA	3377.13
MW013	11/16/1999	3424.11	44.81	NM	NA	3379.30
MW013	05/15/2001	3424.11	45.05	NM	NA	3379.06
MW013	08/23/2001	3424.11	45.11	NM	NA	3379.00
MW013	01/21/2002	3424.11	45.14	NM	NA	3378.97
MW013	04/05/2002	3424.11	45.22	NM	NA	3378.89
MW013	09/03/2002	3424.11	45.11	NM	NA	3379.00
MW013	12/02/2002	3424.11	44.91	NM	NA	3379.20
MW013	01/30/2003	3424.11	44.84	NM	NA	3379.27
MW013	03/28/2003	3424.11	45.91	NM	NA	3378.20
MW013	05/19/2003	3424.11	44.90	NM	NA	3379.21
MW013	09/09/2003	3424.11	44.89	NM	NA	3379.22
MW013	12/02/2003	3424.11	44.75	NM	NA	3379.36
MW013	03/30/2004	3424.11	44.94	NM	NA	3379.17
MW013	06/07/2004	3424.11	44.98	NM	NA	3379.13
MW013	09/17/2004	3424.11	44.82	NM	NA	3379.29
MW013	11/30/2004	3424.11	44.53	NM	NA	3379.58
MW013	03/31/2005	3424.11	44.05	NM	NA	3380.06
MW013	05/23/2005	3424.11	43.85	NM	NA	3380.26
MW013	01/16/2006	3424.11	43.47	NM	NA	3380.64
MW013	06/16/2006	3424.11	43.21	NM	NA	3380.90
MW013	04/18/2007	3424.11	42.83	NM	NA	3381.28
MW013	09/19/2007	3424.11	42.63	NM	NA	3381.48
MW013	03/18/2008	3424.11	42.65	NM	NA	3381.46
MW013	08/04/2008	3424.11	42.96	NM	NA	3381.15
MW013	03/11/2009	3424.11	43.19	NM	NA	3380.92
MW013	07/29/2009	3424.11	43.30	NM	NA	3380.81
MW013	03/01/2010	3424.11	43.41	NM	NA	3380.70
MW013	08/02/2010	3424.11	40.42	NM	NA	3383.69
MW013	05/04/2011	3424.11	43.30	NM	NA	3380.81
MW013	11/01/2011	3423.11	43.30	NM	NA	3379.81
MW013	05/01/2012	3423.11	43.40	NM	NA	3379.71
MW013	10/24/2012	3423.11	43.61	NM	NA	3379.50
MW013	05/01/2013	3423.11	43.76	NM	NA	3379.35
MW013	10/29/2013	3423.11	43.90	NM	NA	3379.21
MW013	05/05/2014	3423.11	43.93	NM	NA	3379.18
MW013	11/03/2014	3423.11	43.65	NM	NA	3379.46
MW013	05/06/2015	3423.11	43.38	NM	NA	3379.73
MW013	11/02/2015	3423.11	43.28	NM	NA	3379.83
MW013	05/10/2016	3423.11	43.19	NM	NA	3379.92
MW013	09/22/2016	3423.11	43.07	NM	NA	3380.04
MW013	05/02/2017	3423.11	42.52	NM	NA	3380.59
MW013	09/18/2017	3423.11	42.46	NM	NA	3380.65
MW013	03/20/2018	3423.11	42.23	NM	NA	3380.88
MW013	09/13/2018	3423.11	42.13	NM	NA	3380.98
MW013	04/10/2019	3423.11	42.11	NM	NA	3381.00
MW013	10/08/2019	3423.11	42.27	NM	NA	3380.84
MW013A	12/18/1997	3424.25	46.84	NM	NA	3377.41
MW013A	11/16/1999	3424.25	45.79	NM	NA	3378.46
MW013A	05/15/2001	3424.25	45.06	NM	NA	3379.19
MW013A	08/23/2001	3424.25	45.22	NM	NA	3379.03
MW013A	01/21/2002	3424.25	45.17	NM	NA	3379.08
MW013A	04/05/2002	3424.25	45.23	NM	NA	3379.02
MW013A	09/03/2002	3424.25	45.15	NM	NA	3379.10
MW013A	12/02/2002	3424.25	44.94	NM	NA	3379.31
MW013A	01/30/2003	3424.25	44.80	NM	NA	3379.45
MW013A	03/28/2003	3424.25	44.96	NM	NA	3379.29
MW013A	05/19/2003	3424.25	44.91	NM	NA	3379.34
MW013A	09/09/2003	3424.25	44.89	NM	NA	3379.36
MW013A	12/02/2003	3424.25	44.78	NM	NA	3379.47
MW013A	03/30/2004	3424.25	45.01	NM	NA	3379.24
MW013A	06/07/2004	3424.25	44.96	NM	NA	3379.29
MW013A	09/17/2004	3424.25	44.80	NM	NA	3379.45
MW013A	11/30/2004	3424.25	44.56	NM	NA	3379.69

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW013A	03/31/2005	3424.25	44.06	NM	NA	3380.19
MW013A	05/23/2005	3424.25	43.82	NM	NA	3380.43
MW013A	01/16/2006	3424.25	43.42	NM	NA	3380.83
MW013A	06/16/2006	3424.25	43.19	NM	NA	3381.06
MW013A	04/16/2007	3424.25	42.81	NM	NA	3381.44
MW013A	09/20/2007	3424.25	42.62	NM	NA	3381.63
MW013A	03/19/2008	3424.25	42.68	NM	NA	3381.57
MW013A	08/04/2008	3424.25	42.44	NM	NA	3381.81
MW013A	03/10/2009	3424.25	43.05	NM	NA	3381.20
MW013A	07/29/2009	3424.25	43.30	NM	NA	3380.95
MW013A	03/01/2010	3424.25	43.39	NM	NA	3380.86
MW013A	08/02/2010	3424.25	43.40	NM	NA	3380.85
MW013A	05/03/2011	3424.25	33.28	NM	NA	3390.97
MW013A	11/02/2011	3424.25	43.29	NM	NA	3380.96
MW013A	05/01/2012	3424.25	43.36	NM	NA	3380.89
MW013A	10/24/2012	3424.25	43.60	NM	NA	3380.65
MW013A	05/01/2013	3424.25	43.75	NM	NA	3380.50
MW013A	10/29/2013	3424.25	43.89	NM	NA	3380.36
MW013A	05/05/2014	3424.25	43.91	NM	NA	3380.34
MW013A	11/03/2014	3424.25	43.60	NM	NA	3380.65
MW013A	05/06/2015	3424.25	43.32	NM	NA	3380.93
MW013A	11/03/2015	3424.25	43.24	NM	NA	3381.01
MW013A	05/10/2016	3424.25	43.14	NM	NA	3381.11
MW013A	09/22/2016	3424.25	43.06	NM	NA	3381.19
MW013A	05/02/2017	3424.25	42.50	NM	NA	3381.75
MW014	11/16/1999	3424.05	45.22	NM	NA	3378.83
MW014	05/15/2001	3424.05	44.61	NM	NA	3379.44
MW014	08/23/2001	3424.05	44.48	NM	NA	3379.57
MW014	01/21/2002	3424.05	44.49	NM	NA	3379.56
MW014	04/05/2002	3424.05	44.60	NM	NA	3379.45
MW014	09/03/2002	3424.05	44.25	NM	NA	3379.80
MW014	12/02/2002	3424.05	44.24	NM	NA	3379.81
MW014	01/30/2003	3424.05	44.19	NM	NA	3379.86
MW014	03/28/2003	3424.05	44.31	NM	NA	3379.74
MW014	05/19/2003	3424.05	44.25	NM	NA	3379.80
MW014	09/09/2003	3424.05	44.18	NM	NA	3379.87
MW014	12/02/2003	3424.05	44.03	NM	NA	3380.02
MW014	03/30/2004	3424.05	44.25	NM	NA	3379.80
MW014	06/07/2004	3424.05	44.18	NM	NA	3379.87
MW014	09/14/2004	3424.05	44.16	NM	NA	3379.89
MW014	11/30/2004	3424.05	43.98	NM	NA	3380.07
MW014	03/31/2005	3424.05	43.57	NM	NA	3380.48
MW014	05/23/2005	3424.05	40.76	NM	NA	3383.29
MW014	01/17/2006	3424.05	42.89	NM	NA	3381.16
MW014	06/16/2006	3424.05	42.78	NM	NA	3381.27
MW014	03/26/2007	3424.05	42.37	NM	NA	3381.68
MW014	09/19/2007	3424.05	42.14	NM	NA	3381.91
MW014	03/19/2008	3424.05	42.22	NM	NA	3381.83
MW014	03/11/2009	3424.05	42.69	NM	NA	3381.36
MW014	07/29/2009	3424.05	42.83	NM	NA	3381.22
MW014	03/01/2010	3424.05	42.97	NM	NA	3381.08
MW014	08/02/2010	3424.05	47.98	NM	NA	3376.07
MW014	05/03/2011	3424.05	42.56	NM	NA	3381.49
MW014	11/01/2011	3424.08	42.89	NM	NA	3381.19
MW014	05/01/2012	3424.08	42.91	NM	NA	3381.17
MW014	10/24/2012	3424.08	43.12	NM	NA	3380.96
MW014	04/30/2013	3424.08	43.20	NM	NA	3380.88
MW014	10/29/2013	3424.08	43.34	NM	NA	3380.74
MW014	05/05/2014	3424.08	43.40	NM	NA	3380.68
MW014	11/03/2014	3424.08	43.20	NM	NA	3380.88
MW014	05/06/2015	3424.08	43.05	NM	NA	3381.03
MW014	11/02/2015	3424.08	42.85	NM	NA	3381.23
MW014A	12/18/1997	3423.93	45.93	NM	NA	3378.00
MW014A	11/16/1999	3423.93	44.89	NM	NA	3379.04
MW014A	05/15/2001	3423.93	44.40	NM	NA	3379.53
MW014A	08/23/2001	3423.93	44.27	NM	NA	3379.66
MW014A	01/21/2002	3423.93	44.25	NM	NA	3379.68
MW014A	04/05/2002	3423.93	44.37	NM	NA	3379.56
MW014A	09/03/2002	3423.93	44.20	NM	NA	3379.73
MW014A	12/02/2002	3423.93	43.99	NM	NA	3379.94

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW014A	01/30/2003	3423.93	43.95	NM	NA	3379.98
MW014A	03/28/2003	3423.93	44.16	NM	NA	3379.77
MW014A	05/19/2003	3423.93	44.01	NM	NA	3379.92
MW014A	09/09/2003	3423.93	43.93	NM	NA	3380.00
MW014A	12/02/2003	3423.93	43.96	NM	NA	3379.97
MW014A	03/30/2004	3423.93	44.05	NM	NA	3379.88
MW014A	06/07/2004	3423.93	43.98	NM	NA	3379.95
MW014A	09/16/2004	3423.93	43.89	NM	NA	3380.04
MW014A	11/30/2004	3423.93	43.71	NM	NA	3380.22
MW014A	03/31/2005	3423.93	43.30	NM	NA	3380.63
MW014A	05/23/2005	3423.93	43.04	NM	NA	3380.89
MW014A	01/17/2006	3423.93	42.65	NM	NA	3381.28
MW014A	06/16/2006	3423.93	42.49	NM	NA	3381.44
MW014A	03/21/2007	3423.93	42.15	NM	NA	3381.78
MW014A	09/12/2007	3423.93	41.92	NM	NA	3382.01
MW014A	03/18/2008	3423.93	41.31	NM	NA	3382.62
MW014A	03/10/2009	3423.93	42.33	NM	NA	3381.60
MW014A	07/28/2009	3423.93	42.65	NM	NA	3381.28
MW014A	03/01/2010	3423.93	42.67	NM	NA	3381.26
MW014A	08/02/2010	3423.93	47.70	NM	NA	3376.23
MW014A	05/03/2011	3423.93	42.86	NM	NA	3381.07
MW014A	11/02/2011	3423.90	42.65	NM	NA	3381.25
MW014A	05/01/2012	3423.90	42.62	NM	NA	3381.28
MW014A	10/24/2012	3423.90	42.81	NM	NA	3381.09
MW014A	04/30/2013	3423.90	42.91	NM	NA	3380.99
MW014A	10/29/2013	3423.90	43.00	NM	NA	3380.90
MW014A	05/05/2014	3423.90	43.12	NM	NA	3380.78
MW014A	11/03/2014	3423.90	42.93	NM	NA	3380.97
MW014A	05/06/2015	3423.90	42.66	NM	NA	3381.24
MW014A	11/03/2015	3423.90	42.54	NM	NA	3381.36
MW015	11/16/1999	3420.40	41.46	NM	NA	3378.94
MW015	05/15/2001	3420.40	40.85	NM	NA	3379.55
MW015	08/23/2001	3420.40	40.85	NM	NA	3379.55
MW015	01/21/2002	3420.40	40.81	NM	NA	3379.59
MW015	04/04/2002	3420.40	40.99	NM	NA	3379.41
MW015	09/03/2002	3420.40	40.75	NM	NA	3379.65
MW015	12/02/2002	3420.40	40.53	NM	NA	3379.87
MW015	01/30/2003	3420.40	40.51	NM	NA	3379.89
MW015	03/28/2003	3420.40	40.64	NM	NA	3379.76
MW015	05/19/2003	3420.40	40.56	NM	NA	3379.84
MW015	09/08/2003	3420.40	40.57	NM	NA	3379.83
MW015	12/02/2003	3420.40	40.51	NM	NA	3379.89
MW015	03/30/2004	3420.40	40.81	NM	NA	3379.59
MW015	06/07/2004	3420.40	40.60	NM	NA	3379.80
MW015	09/16/2004	3420.40	40.55	NM	NA	3379.85
MW015	11/30/2004	3420.40	40.22	NM	NA	3380.18
MW015	03/31/2005	3420.40	39.77	NM	NA	3380.63
MW015	05/23/2005	3420.40	39.58	NM	NA	3380.82
MW015	01/17/2006	3420.40	39.17	NM	NA	3381.23
MW015	06/16/2006	3420.40	39.13	NM	NA	3381.27
MW015	03/22/2007	3420.40	38.83	NM	NA	3381.57
MW015	09/18/2007	3420.40	38.51	NM	NA	3381.89
MW015	03/18/2008	3420.40	38.59	NM	NA	3381.81
MW015	08/04/2008	3420.40	39.02	NM	NA	3381.38
MW015	03/10/2009	3420.40	39.11	NM	NA	3381.29
MW015	07/28/2009	3420.40	39.35	NM	NA	3381.05
MW015	03/01/2010	3420.40	39.50	NM	NA	3380.90
MW015	08/02/2010	3420.40	39.49	NM	NA	3380.91
MW015	05/03/2011	3420.40	39.51	NM	NA	3380.89
MW015	11/01/2011	3420.40	39.58	NM	NA	3380.82
MW015	05/01/2012	3420.40	39.61	NM	NA	3380.79
MW015	10/24/2012	3420.40	39.87	NM	NA	3380.53
MW015	04/30/2013	3420.40	39.85	NM	NA	3380.55
MW015	10/29/2013	3420.40	40.07	NM	NA	3380.33
MW015	05/05/2014	3420.40	40.15	NM	NA	3380.25
MW015	11/03/2014	3420.40	39.83	NM	NA	3380.57
MW015	05/06/2015	3420.40	39.50	NM	NA	3380.90
MW015	11/02/2015	3420.40	39.38	NM	NA	3381.02
MW015	05/09/2016	3420.40	39.22	NM	NA	3381.18
MW015	09/22/2016	3420.40	39.20	NM	NA	3381.20

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW015	05/02/2017	3420.40	38.53	NM	NA	3381.87
MW015A	12/18/1997	3420.55	42.50	NM	NA	3378.05
MW015A	11/16/1999	3420.55	41.33	NM	NA	3379.22
MW015A	05/15/2001	3420.55	40.69	NM	NA	3379.86
MW015A	08/23/2001	3420.55	40.71	NM	NA	3379.84
MW015A	01/21/2002	3420.55	40.72	NM	NA	3379.83
MW015A	04/04/2002	3420.55	40.89	NM	NA	3379.66
MW015A	09/03/2002	3420.55	40.66	NM	NA	3379.89
MW015A	12/02/2002	3420.55	40.43	NM	NA	3380.12
MW015A	01/30/2003	3420.55	40.30	NM	NA	3380.25
MW015A	03/28/2003	3420.55	40.54	NM	NA	3380.01
MW015A	05/19/2003	3420.55	40.52	NM	NA	3380.03
MW015A	09/08/2003	3420.55	40.49	NM	NA	3380.06
MW015A	12/02/2003	3420.55	40.42	NM	NA	3380.13
MW015A	03/30/2004	3420.55	40.72	NM	NA	3379.83
MW015A	06/07/2004	3420.55	40.61	NM	NA	3379.94
MW015A	09/16/2004	3420.55	40.44	NM	NA	3380.11
MW015A	11/30/2004	3420.55	40.21	NM	NA	3380.34
MW015A	03/31/2005	3420.55	39.70	NM	NA	3380.85
MW015A	05/23/2005	3420.55	39.50	NM	NA	3381.05
MW015A	01/17/2006	3420.55	39.17	NM	NA	3381.38
MW015A	06/16/2006	3420.55	39.03	NM	NA	3381.52
MW015A	03/22/2007	3420.55	38.74	NM	NA	3381.81
MW015A	09/13/2007	3420.55	38.42	NM	NA	3382.13
MW015A	03/18/2008	3420.55	38.63	NM	NA	3381.92
MW015A	08/04/2008	3420.55	38.91	NM	NA	3381.64
MW015A	03/10/2009	3420.55	39.05	NM	NA	3381.50
MW015A	07/28/2009	3420.55	39.28	NM	NA	3381.27
MW015A	03/01/2010	3420.55	39.45	NM	NA	3381.10
MW015A	08/02/2010	3420.55	49.45	NM	NA	3371.10
MW015A	05/03/2011	3420.55	39.58	NM	NA	3380.97
MW015A	11/02/2011	3420.55	39.48	NM	NA	3381.07
MW015A	05/01/2012	3420.55	39.55	NM	NA	3381.00
MW015A	10/25/2012	3420.55	38.04	NM	NA	3382.51
MW015A	04/30/2013	3420.55	39.82	NM	NA	3380.73
MW015A	10/29/2013	3420.55	40.11	NM	NA	3380.44
MW015A	05/05/2014	3420.55	40.15	NM	NA	3380.40
MW015A	11/03/2014	3420.55	39.83	NM	NA	3380.72
MW015A	09/06/2015	3420.55	39.52	NM	NA	3381.03
MW015A	11/03/2015	3420.55	39.51	NM	NA	3381.04
MW015A	05/09/2016	3420.55	39.29	NM	NA	3381.26
MW015A	09/22/2016	3420.55	39.27	NM	NA	3381.28
MW015A	05/02/2017	3420.55	38.59	NM	NA	3381.96
MW015A	09/18/2017	3420.55	38.52	NM	NA	3382.03
MW015A	03/21/2018	3420.55	57.5	NM	NA	3363.05
MW015A	09/13/2018	3420.55	38.26	NM	NA	3382.29
MW015A	04/10/2019	3420.55	38.10	NM	NA	3382.45
MW015A	10/07/2019	3420.55	38.36	NM	NA	3382.19
MW016A	12/18/1997	3419.92	41.98	NM	NA	3377.94
MW016A	11/16/1999	3419.92	40.80	NM	NA	3379.12
MW016A	05/15/2001	3419.92	40.34	NM	NA	3379.58
MW016A	08/23/2001	3419.92	40.21	NM	NA	3379.71
MW016A	01/21/2002	3419.92	40.33	NM	NA	3379.59
MW016A	04/04/2002	3419.92	40.51	NM	NA	3379.41
MW016A	09/03/2002	3419.92	40.16	NM	NA	3379.76
MW016A	12/02/2002	3419.92	39.90	NM	NA	3380.02
MW016A	01/30/2003	3419.92	39.89	NM	NA	3380.03
MW016A	03/28/2003	3419.92	40.05	NM	NA	3379.87
MW016A	05/19/2003	3419.92	40.15	NM	NA	3379.77
MW016A	09/08/2003	3419.92	40.11	NM	NA	3379.81
MW016A	12/02/2003	3419.92	40.17	NM	NA	3379.75
MW016A	03/30/2004	3419.92	40.43	NM	NA	3379.49
MW016A	06/07/2004	3419.92	40.26	NM	NA	3379.66
MW016A	09/16/2004	3419.92	39.98	NM	NA	3379.94
MW016A	11/30/2004	3419.92	39.53	NM	NA	3380.39
MW016A	03/31/2005	3419.92	39.05	NM	NA	3380.87
MW016A	05/23/2005	3419.92	38.96	NM	NA	3380.96
MW016A	01/17/2006	3419.92	38.53	NM	NA	3381.39
MW016A	06/16/2006	3419.92	38.62	NM	NA	3381.30
MW016A	03/22/2007	3419.92	38.32	NM	NA	3381.60

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW016A	09/12/2007	3419.92	37.98	NM	NA	3381.94
MW016A	03/18/2008	3419.92	38.29	NM	NA	3381.63
MW016A	08/04/2008	3419.92	38.58	NM	NA	3381.34
MW016A	03/10/2009	3419.92	38.75	NM	NA	3381.17
MW016A	07/28/2009	3419.92	38.96	NM	NA	3380.96
MW016A	03/01/2010	3419.92	39.08	NM	NA	3380.84
MW016A	08/02/2010	3419.92	39.02	NM	NA	3380.90
MW016A	05/03/2011	3419.92	39.21	NM	NA	3380.71
MW016A	11/02/2011	3419.92	39.21	NM	NA	3380.71
MW016A	05/17/2012	3419.92	39.44	NM	NA	3380.48
MW016A	10/25/2012	3419.92	39.43	NM	NA	3380.49
MW016A	05/01/2013	3419.92	39.64	NM	NA	3380.28
MW016A	10/29/2013	3419.92	39.78	NM	NA	3380.14
MW016A	05/05/2014	3419.92	39.89	NM	NA	3380.03
MW016A	11/13/2014	3419.92	39.40	NM	NA	3380.52
MW016A	05/06/2015	3419.92	39.11	NM	NA	3380.81
MW016A	11/03/2015	3419.92	39.01	NM	NA	3380.91
MW016A	09/14/2018	3419.92	37.83	NM	NA	3382.09
MW017A	12/18/1997	3424.38	46.05	NM	NA	3378.33
MW017A	11/16/1999	3424.38	45.12	NM	NA	3379.26
MW017A	05/15/2001	3424.38	44.53	NM	NA	3379.85
MW017A	08/23/2001	3424.38	44.49	NM	NA	3379.89
MW017A	01/21/2002	3424.38	44.42	NM	NA	3379.96
MW017A	04/04/2002	3424.38	44.58	NM	NA	3379.80
MW017A	09/03/2002	3424.38	44.38	NM	NA	3380.00
MW017A	12/02/2002	3424.38	44.15	NM	NA	3380.23
MW017A	01/30/2003	3424.38	44.10	NM	NA	3380.28
MW017A	03/28/2003	3424.38	44.23	NM	NA	3380.15
MW017A	05/19/2003	3424.38	44.19	NM	NA	3380.19
MW017A	09/08/2003	3424.38	44.13	NM	NA	3380.25
MW017A	12/02/2003	3424.38	44.07	NM	NA	3380.31
MW017A	03/30/2004	3424.38	44.26	NM	NA	3380.12
MW017A	06/07/2004	3424.38	44.21	NM	NA	3380.17
MW017A	09/16/2004	3424.38	44.14	NM	NA	3380.24
MW017A	11/30/2004	3424.38	43.89	NM	NA	3380.49
MW017A	03/31/2005	3424.38	43.44	NM	NA	3380.94
MW017A	05/23/2005	3424.28	43.24	NM	NA	3381.04
MW017A	01/17/2006	3424.28	42.80	NM	NA	3381.48
MW017A	06/16/2006	3424.28	42.69	NM	NA	3381.59
MW017A	03/21/2007	3424.28	42.42	NM	NA	3381.86
MW017A	09/13/2007	3424.28	42.13	NM	NA	3382.15
MW017A	03/21/2008	3424.28	42.42	NM	NA	3381.86
MW017A	09/13/2008	3424.28	42.13	NM	NA	3382.15
MW018	11/16/1999	3417.15	37.82	NM	NA	3379.33
MW018	05/15/2001	3417.15	37.90	NM	NA	3379.25
MW018	08/23/2001	3417.15	37.26	NM	NA	3379.89
MW018	01/21/2002	3417.15	37.90	NM	NA	3379.25
MW018	04/04/2002	3417.15	38.15	NM	NA	3379.00
MW018	09/03/2002	3417.15	37.34	NM	NA	3379.81
MW018	12/02/2002	3417.15	37.37	NM	NA	3379.78
MW018	01/30/2003	3417.15	37.38	NM	NA	3379.77
MW018	03/28/2003	3417.15	37.66	NM	NA	3379.49
MW018	05/19/2003	3417.15	37.81	NM	NA	3379.34
MW018	09/08/2003	3417.15	37.82	NM	NA	3379.33
MW018	12/02/2003	3417.15	37.99	NM	NA	3379.16
MW018	03/30/2004	3417.15	38.30	NM	NA	3378.85
MW018	06/07/2004	3417.15	37.86	NM	NA	3379.29
MW018	09/16/2004	3417.15	37.48	NM	NA	3379.67
MW018	11/29/2004	3417.15	36.48	NM	NA	3380.67
MW018	03/31/2005	3417.15	36.32	NM	NA	3380.83
MW018	05/23/2005	3417.15	36.18	NM	NA	3380.97
MW018	01/17/2006	3417.15	36.05	NM	NA	3381.10
MW018	06/16/2006	3417.15	36.31	NM	NA	3380.84
MW018	04/02/2007	3417.15	35.95	NM	NA	3381.20
MW018	09/13/2007	3417.15	35.18	NM	NA	3381.97
MW018	03/18/2008	3417.15	36.19	NM	NA	3380.96
MW018	03/10/2009	3417.15	36.59	NM	NA	3380.56
MW018	07/28/2009	3417.15	36.83	NM	NA	3380.32
MW018	03/01/2010	3417.15	36.74	NM	NA	3380.41
MW018	08/02/2010	3417.15	36.38	NM	NA	3380.77

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW018	11/01/2011	3417.15	37.11	NM	NA	3380.04
MW018	05/22/2012	3417.15	37.35	NM	NA	3379.80
MW018	10/24/2012	3417.15	37.24	NM	NA	3379.91
MW018	04/30/2013	3417.15	37.50	NM	NA	3379.65
MW018	10/29/2013	3417.15	37.60	NM	NA	3379.55
MW018	05/05/2014	3417.15	37.74	NM	NA	3379.41
MW018	11/04/2014	3417.15	36.70	NM	NA	3380.45
MW018	05/05/2015	3417.15	36.90	NM	NA	3380.25
MW018	11/03/2015	3417.15	36.80	NM	NA	3380.35
MW018	05/10/2016	3417.15	36.55	NM	NA	3380.60
MW018	09/22/2016	3417.15	36.18	NM	NA	3380.97
MW018	05/02/2017	3417.15	35.75	NM	NA	3381.40
MW018	09/18/2017	3417.15	35.26	NM	NA	3381.89
MW018	03/20/2018	3417.15	35.34	NM	NA	3381.81
MW018	09/13/2018	3417.15	35.33	NM	NA	3381.82
MW018	04/10/2019	3417.15	35.33	NM	NA	3381.82
MW018	10/07/2019	3417.15	39.65	NM	NA	3377.50
MW018A	12/18/1997	3416.86	39.16	NM	NA	3377.70
MW018A	11/16/1999	3416.86	37.52	NM	NA	3379.34
MW018A	05/15/2001	3416.86	37.62	NM	NA	3379.24
MW018A	08/23/2001	3416.86	37.55	NM	NA	3379.31
MW018A	01/21/2002	3416.86	37.62	NM	NA	3379.24
MW018A	04/04/2002	3416.86	37.89	NM	NA	3378.97
MW018A	09/03/2002	3416.86	37.03	NM	NA	3379.83
MW018A	12/02/2002	3416.86	37.01	NM	NA	3379.85
MW018A	01/30/2003	3416.86	37.12	NM	NA	3379.74
MW018A	03/28/2003	3416.86	37.38	NM	NA	3379.48
MW018A	05/19/2003	3416.86	37.54	NM	NA	3379.32
MW018A	09/08/2003	3416.86	37.51	NM	NA	3379.35
MW018A	12/02/2003	3416.86	37.65	NM	NA	3379.21
MW018A	03/30/2004	3416.86	38.01	NM	NA	3378.85
MW018A	06/07/2004	3416.86	37.56	NM	NA	3379.30
MW018A	09/16/2004	3416.86	37.20	NM	NA	3379.66
MW018A	11/29/2004	3416.86	36.11	NM	NA	3380.75
MW018A	03/31/2005	3416.86	35.99	NM	NA	3380.87
MW018A	05/23/2005	3416.86	35.86	NM	NA	3381.00
MW018A	01/17/2006	3416.86	35.78	NM	NA	3381.08
MW018A	06/16/2006	3416.86	36.01	NM	NA	3380.85
MW018A	04/02/2007	3416.86	35.65	NM	NA	3381.21
MW018A	09/12/2007	3416.86	35.51	NM	NA	3381.35
MW018A	03/18/2008	3416.86	35.88	NM	NA	3380.98
MW018A	03/10/2009	3416.86	36.29	NM	NA	3380.57
MW018A	07/28/2009	3416.86	36.49	NM	NA	3380.37
MW018A	03/01/2010	3416.86	36.40	NM	NA	3380.46
MW018A	08/02/2010	3416.86	36.05	NM	NA	3380.81
MW018A	11/02/2011	3416.86	36.80	NM	NA	3380.06
MW018A	05/22/2012	3416.86	37.01	NM	NA	3379.85
MW018A	10/24/2012	3416.86	36.93	NM	NA	3379.93
MW018A	04/30/2013	3416.86	37.15	NM	NA	3379.71
MW019A	12/18/1997	3414.74	39.83	NM	NA	3374.91
MW019A	11/16/1999	3414.74	38.12	NM	NA	3376.62
MW019A	05/15/2001	3414.74	38.02	NM	NA	3376.72
MW019A	08/23/2001	3414.74	37.62	NM	NA	3377.12
MW019A	01/21/2002	3414.74	37.92	NM	NA	3376.82
MW019A	04/04/2002	3414.74	38.15	NM	NA	3376.59
MW019A	09/03/2002	3414.74	37.40	NM	NA	3377.34
MW019A	12/02/2002	3414.74	37.46	NM	NA	3377.28
MW019A	01/30/2003	3414.74	37.61	NM	NA	3377.13
MW019A	03/28/2003	3414.74	37.79	NM	NA	3376.95
MW019A	05/19/2003	3414.74	37.91	NM	NA	3376.83
MW019A	09/08/2003	3414.74	38.06	NM	NA	3376.68
MW019A	12/02/2003	3414.74	38.22	NM	NA	3376.52
MW019A	03/30/2004	3414.74	38.41	NM	NA	3376.33
MW019A	06/07/2004	3414.74	37.93	NM	NA	3376.81
MW019A	09/16/2004	3414.74	37.82	NM	NA	3376.92
MW019A	11/29/2004	3414.74	36.70	NM	NA	3378.04
MW019A	03/31/2005	3414.74	36.35	NM	NA	3378.39
MW019A	05/23/2005	3414.74	36.62	NM	NA	3378.12
MW019A	01/17/2006	3414.74	36.37	NM	NA	3378.37
MW019A	06/16/2006	3414.74	36.61	NM	NA	3378.13

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW019A	04/04/2007	3414.74	36.30	NM	NA	3378.44
MW019A	09/13/2007	3414.74	35.96	NM	NA	3378.78
MW019A	03/18/2008	3414.74	36.50	NM	NA	3378.24
MW019A	08/04/2008	3414.74	36.82	NM	NA	3377.92
MW019A	03/10/2009	3414.74	36.74	NM	NA	3378.00
MW019A	07/28/2009	3414.74	37.00	NM	NA	3377.74
MW019A	03/01/2010	3414.74	36.72	NM	NA	3378.02
MW019A	07/30/2010	3414.74	36.39	NM	NA	3378.35
MW019A	11/02/2011	3414.74	39.48	NM	NA	3375.26
MW019A	05/22/2012	3414.74	37.70	NM	NA	3377.04
MW019A	10/24/2012	3414.74	37.79	NM	NA	3376.95
MW019A	04/30/2013	3414.74	37.76	NM	NA	3376.98
MW019A	05/05/2014	3414.74	37.81	NM	NA	3376.93
MW019A	11/04/2014	3414.74	37.03	NM	NA	3377.71
MW019A	05/05/2015	3414.74	37.01	NM	NA	3377.73
MW019A	11/03/2015	3414.74	37.25	NM	NA	3377.49
MW019A	05/10/2016	3414.74	36.68	NM	NA	3378.06
MW019A	09/22/2016	3414.74	36.54	NM	NA	3378.20
MW019A	05/02/2017	3414.74	35.16	NM	NA	3379.58
MW019A	09/18/2017	3414.74	35.42	NM	NA	3379.32
MW019A	03/20/2018	3414.74	35.48	NM	NA	3379.26
MW019A	09/13/2018	3414.74	35.37	NM	NA	3379.37
MW019A	04/09/2019	3414.74	35.55	NM	NA	3379.19
MW019A	10/07/2019	3414.74	37.99	NM	NA	3376.75
MW020	11/16/1999	3420.85	44.58	NM	NA	3376.27
MW020	02/06/2002	3420.85	44.02	NM	NA	3376.83
MW020	09/03/2002	3420.85	43.79	NM	NA	3377.06
MW020	12/09/2002	3420.85	43.84	NM	NA	3377.01
MW020	01/30/2003	3420.85	43.78	NM	NA	3377.07
MW020	03/28/2003	3420.85	43.86	NM	NA	3376.99
MW020	06/05/2003	3420.85	43.93	NM	NA	3376.92
MW020	01/22/2004	3420.85	44.39	NM	NA	3376.46
MW020	03/30/2004	3420.85	44.41	NM	NA	3376.44
MW020	06/07/2004	3420.85	44.16	NM	NA	3376.69
MW020	09/17/2004	3420.85	43.99	NM	NA	3376.86
MW020	11/29/2004	3420.85	43.59	NM	NA	3377.26
MW020	04/01/2005	3420.85	43.12	NM	NA	3377.73
MW020	05/23/2005	3420.85	42.99	NM	NA	3377.86
MW020	01/17/2006	3420.85	42.61	NM	NA	3378.24
MW020	06/16/2006	3420.85	42.55	NM	NA	3378.30
MW020	04/04/2007	3420.85	42.23	NM	NA	3378.62
MW020	03/18/2008	3420.85	42.25	NM	NA	3378.60
MW020	08/04/2008	3420.85	42.57	NM	NA	3378.28
MW020	03/10/2009	3420.85	42.67	NM	NA	3378.18
MW020	07/28/2009	3420.85	42.88	NM	NA	3377.97
MW020	03/01/2010	3420.85	42.86	NM	NA	3377.99
MW020	07/30/2010	3420.85	42.80	NM	NA	3378.05
MW020	05/03/2011	3420.85	42.99	NM	NA	3377.86
MW020	11/01/2011	3420.85	43.70	NM	NA	3377.15
MW020	05/02/2012	3420.85	43.30	NM	NA	3377.55
MW020	10/24/2012	3420.85	43.48	NM	NA	3377.37
MW020	04/30/2013	3420.85	43.62	NM	NA	3377.23
MW020	10/29/2013	3420.85	43.82	NM	NA	3377.03
MW020	05/05/2014	3420.85	43.83	NM	NA	3377.02
MW020	11/04/2014	3420.85	43.45	NM	NA	3377.40
MW020	05/05/2015	3420.85	43.01	NM	NA	3377.84
MW020	11/03/2015	3420.85	43.14	NM	NA	3377.71
MW020	05/10/2016	3420.85	42.75	NM	NA	3378.10
MW020	09/22/2016	3420.85	42.80	NM	NA	3378.05
MW020	05/03/2017	3420.85	42.03	NM	NA	3378.82
MW020A	11/16/1999	3421.14	44.70	NM	NA	3376.44
MW020A	02/06/2002	3421.14	44.14	NM	NA	3377.00
MW020A	09/03/2002	3421.14	43.98	NM	NA	3377.16
MW020A	12/09/2002	3421.14	44.06	NM	NA	3377.08
MW020A	01/30/2003	3421.14	43.98	NM	NA	3377.16
MW020A	03/28/2003	3421.14	44.05	NM	NA	3377.09
MW020A	06/05/2003	3421.14	44.44	NM	NA	3376.70
MW020A	01/22/2004	3421.14	44.68	NM	NA	3376.46
MW020A	03/30/2004	3421.14	44.59	NM	NA	3376.55
MW020A	06/07/2004	3421.14	44.33	NM	NA	3376.81

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW020A	09/17/2004	3421.14	44.15	NM	NA	3376.99
MW020A	11/29/2004	3421.14	43.75	NM	NA	3377.39
MW020A	04/01/2005	3421.14	43.24	NM	NA	3377.90
MW020A	05/23/2005	3421.14	43.16	NM	NA	3377.98
MW020A	01/17/2006	3421.14	42.87	NM	NA	3378.27
MW020A	06/16/2006	3421.14	42.74	NM	NA	3378.40
MW020A	04/04/2007	3421.14	42.40	NM	NA	3378.74
MW020A	03/18/2008	3421.14	42.41	NM	NA	3378.73
MW020A	08/04/2008	3421.14	42.76	NM	NA	3378.38
MW020A	03/10/2009	3421.14	42.85	NM	NA	3378.29
MW020A	07/28/2009	3421.14	43.08	NM	NA	3378.06
MW020A	03/01/2010	3421.14	43.04	NM	NA	3378.10
MW020A	07/30/2010	3421.14	42.99	NM	NA	3378.15
MW020A	05/03/2011	3421.14	43.18	NM	NA	3377.96
MW020A	11/02/2011	3421.14	41.11	NM	NA	3380.03
MW020A	05/02/2012	3421.14	43.49	NM	NA	3377.65
MW020A	10/24/2012	3421.14	43.66	NM	NA	3377.48
MW020A	04/30/2013	3421.14	43.78	NM	NA	3377.36
MW020A	10/29/2013	3421.14	44.00	NM	NA	3377.14
MW020A	05/05/2014	3421.14	44.01	NM	NA	3377.13
MW020A	11/04/2014	3421.14	43.62	NM	NA	3377.52
MW020A	05/05/2015	3421.14	43.23	NM	NA	3377.91
MW020A	11/03/2015	3421.14	43.32	NM	NA	3377.82
MW020A	05/10/2016	3421.14	44.94	NM	NA	3376.20
MW020A	09/22/2016	3421.14	42.98	NM	NA	3378.16
MW020A	05/03/2017	3421.14	42.21	NM	NA	3378.93
MW020A	09/18/2017	3421.14	41.88	NM	NA	3379.26
MW020A	03/21/2018	3421.14	41.79	NM	NA	3379.35
MW020A	09/13/2018	3421.14	41.28	NM	NA	3379.86
MW020A	04/09/2019	3421.14	41.72	NM	NA	3379.42
MW020A	10/07/2019	3421.14	41.95	NM	NA	3379.19
MW021	11/16/1999	3422.72	47.82	NM	NA	3374.90
MW021	05/15/2001	3422.72	47.09	NM	NA	3375.63
MW021	08/23/2001	3422.72	47.34	NM	NA	3375.38
MW021	01/21/2002	3422.72	47.19	NM	NA	3375.53
MW021	04/04/2002	3422.72	47.35	NM	NA	3375.37
MW021	09/03/2002	3422.72	47.25	NM	NA	3375.47
MW021	12/02/2002	3422.72	47.01	NM	NA	3375.71
MW021	01/30/2003	3422.72	46.98	NM	NA	3375.74
MW021	03/28/2003	3422.72	47.02	NM	NA	3375.70
MW021	05/19/2003	3422.72	47.09	NM	NA	3375.63
MW021	09/08/2003	3422.72	47.21	NM	NA	3375.51
MW021	01/21/2004	3422.72	47.22	NM	NA	3375.50
MW021	03/30/2004	3422.72	47.21	NM	NA	3375.51
MW021	06/07/2004	3422.72	47.45	NM	NA	3375.27
MW021	09/17/2004	3422.72	47.15	NM	NA	3375.57
MW021	11/29/2004	3422.72	46.80	NM	NA	3375.92
MW021	03/31/2005	3422.72	46.28	NM	NA	3376.44
MW021	05/23/2005	3422.72	46.22	NM	NA	3376.50
MW021	01/18/2006	3422.72	45.68	NM	NA	3377.04
MW021	06/14/2006	3422.72	45.45	NM	NA	3377.27
MW021	04/09/2007	3422.72	45.10	NM	NA	3377.62
MW021	09/18/2007	3422.72	45.81	NM	NA	3376.91
MW021	03/18/2008	3422.72	45.07	NM	NA	3377.65
MW021	08/04/2008	3422.72	46.23	NM	NA	3376.49
MW021	03/10/2009	3422.72	45.60	NM	NA	3377.12
MW021	07/28/2009	3422.72	45.77	NM	NA	3376.95
MW021	03/01/2010	3422.72	45.71	NM	NA	3377.01
MW021	08/02/2010	3422.72	45.89	NM	NA	3376.83
MW021	05/04/2011	3422.72	45.23	NM	NA	3377.49
MW021	11/01/2011	3422.72	46.07	NM	NA	3376.65
MW021	05/02/2012	3422.72	46.11	NM	NA	3376.61
MW021	10/24/2012	3422.72	46.52	NM	NA	3376.20
MW021	04/29/2013	3422.72	46.58	NM	NA	3376.14
MW021A	08/04/1980	3422.94	45.49	NM	NA	3377.45
MW021A	11/16/1999	3422.94	48.41	NM	NA	3374.53
MW021A	05/15/2001	3422.94	47.57	NM	NA	3375.37
MW021A	08/23/2001	3422.94	47.98	NM	NA	3374.96
MW021A	01/21/2002	3422.94	47.83	NM	NA	3375.11
MW021A	04/04/2002	3422.94	47.98	NM	NA	3374.96

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW021A	09/03/2002	3422.94	48.07	NM	NA	3374.87
MW021A	12/02/2002	3422.94	47.63	NM	NA	3375.31
MW021A	01/30/2003	3422.94	47.61	NM	NA	3375.33
MW021A	03/28/2003	3422.94	47.71	NM	NA	3375.23
MW021A	05/19/2003	3422.94	47.96	NM	NA	3374.98
MW021A	09/08/2003	3422.94	48.01	NM	NA	3374.93
MW021A	01/21/2004	3422.94	48.73	NM	NA	3374.21
MW021A	03/30/2004	3422.94	47.94	NM	NA	3375.00
MW021A	06/07/2004	3422.94	48.28	NM	NA	3374.66
MW021A	09/14/2004	3422.94	47.95	NM	NA	3374.99
MW021A	11/29/2004	3422.94	47.35	NM	NA	3375.59
MW021A	03/31/2005	3422.94	46.93	NM	NA	3376.01
MW021A	05/23/2005	3422.94	47.04	NM	NA	3375.90
MW021A	01/18/2006	3422.94	46.34	NM	NA	3376.60
MW021A	06/14/2006	3422.94	46.35	NM	NA	3376.59
MW021A	04/09/2007	3422.94	45.80	NM	NA	3377.14
MW021A	09/18/2007	3422.94	45.09	NM	NA	3377.85
MW021A	03/19/2008	3422.94	45.08	NM	NA	3377.86
MW021A	03/10/2009	3422.94	46.28	NM	NA	3376.66
MW021A	07/28/2009	3422.94	46.46	NM	NA	3376.48
MW021A	03/01/2010	3422.94	46.34	NM	NA	3376.60
MW021A	08/02/2010	3422.94	46.83	NM	NA	3376.11
MW021A	05/06/2011	3422.94	46.44	NM	NA	3376.50
MW021A	11/04/2011	3422.94	46.74	NM	NA	3376.20
MW021A	05/02/2012	3422.94	47.97	NM	NA	3374.97
MW021A	10/24/2012	3422.94	47.44	NM	NA	3375.50
MW021A	04/29/2013	3422.94	48.06	NM	NA	3374.88
MW021A	10/29/2013	3422.94	47.95	NM	NA	3374.99
MW021A	05/05/2014	3422.94	47.70	NM	NA	3375.24
MW021A	11/03/2014	3422.94	47.06	NM	NA	3375.88
MW021A	05/05/2015	3422.94	46.62	NM	NA	3376.32
MW021A	11/02/2015	3422.94	46.82	NM	NA	3376.12
MW021A	05/11/2016	3422.94	46.46	NM	NA	3376.48
MW021A	09/22/2016	3422.94	46.48	NM	NA	3376.46
MW021A	05/01/2017	3422.94	46.13	NM	NA	3376.81
MW021A	09/18/2017	3422.94	46.33	NM	NA	3376.61
MW021A	03/20/2018	3422.94	45.78	NM	NA	3377.16
MW021A	09/12/2018	3422.94	46.01	NM	NA	3376.93
MW021A	04/09/2019	3422.94	45.47	NM	NA	3377.47
MW021A	10/07/2019	3422.94	45.73	NM	NA	3377.21
MW022A	11/16/1999	3431.13	57.29	NM	NA	3373.84
MW022A	05/15/2001	3431.13	53.35	NM	NA	3377.78
MW022A	08/23/2001	3431.13	53.96	NM	NA	3377.17
MW022A	01/21/2002	3431.13	53.75	NM	NA	3377.38
MW022A	04/04/2002	3431.13	66.00	NM	NA	3365.13
MW022A	09/03/2002	3431.13	52.96	NM	NA	3378.17
MW022A	12/02/2002	3431.13	52.95	NM	NA	3378.18
MW022A	01/31/2003	3431.13	53.25	NM	NA	3377.88
MW022A	03/28/2003	3431.13	53.58	NM	NA	3377.55
MW022A	05/19/2003	3431.13	53.26	NM	NA	3377.87
MW022A	09/09/2003	3431.13	66.99	NM	NA	3364.14
MW022A	12/03/2003	3431.13	66.97	NM	NA	3364.16
MW022A	03/30/2004	3431.13	64.08	NM	NA	3367.05
MW022A	06/07/2004	3431.13	61.36	NM	NA	3369.77
MW022A	09/17/2004	3431.13	53.22	NM	NA	3377.91
MW022A	11/30/2004	3431.13	54.56	NM	NA	3376.57
MW022A	03/31/2005	3431.13	52.44	NM	NA	3378.69
MW022A	05/23/2005	3431.13	52.30	NM	NA	3378.83
MW022A	01/16/2006	3431.13	52.56	NM	NA	3378.57
MW022A	06/19/2006	3431.13	47.04	NM	NA	3384.09
MW022A	03/30/2007	3431.13	50.80	NM	NA	3380.33
MW022A	09/13/2007	3431.13	50.84	NM	NA	3380.29
MW022A	03/18/2008	3431.13	50.78	NM	NA	3380.35
MW022A	08/04/2008	3431.13	51.02	NM	NA	3380.11
MW022A	03/10/2009	3431.13	51.09	NM	NA	3380.04
MW022A	07/28/2009	3431.13	51.20	NM	NA	3379.93
MW022A	03/01/2010	3431.13	51.28	NM	NA	3379.85
MW022A	08/02/2010	3431.13	51.29	NM	NA	3379.84
MW022A	05/06/2011	3431.13	51.07	NM	NA	3380.06
MW022A	11/04/2011	3431.13	51.28	NM	NA	3379.85

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW022A	05/03/2012	3431.13	51.34	NM	NA	3379.79
MW022A	10/24/2012	3431.13	51.54	NM	NA	3379.59
MW022A	05/02/2013	3431.13	51.71	NM	NA	3379.42
MW023	11/16/1999	3436.44	58.42	NM	NA	3378.02
MW023	05/15/2001	3436.44	57.73	NM	NA	3378.71
MW023	08/23/2001	3436.44	57.79	NM	NA	3378.65
MW023	02/07/2002	3436.44	57.77	NM	NA	3378.67
MW023	09/03/2002	3436.44	57.69	NM	NA	3378.75
MW023	12/02/2002	3436.44	57.46	NM	NA	3378.98
MW023	01/30/2003	3436.44	57.41	NM	NA	3379.03
MW023	03/28/2003	3436.44	57.50	NM	NA	3378.94
MW023	05/19/2003	3436.44	57.41	NM	NA	3379.03
MW023	09/09/2003	3436.44	57.39	NM	NA	3379.05
MW023	12/02/2003	3436.44	57.14	NM	NA	3379.30
MW023	03/30/2004	3436.44	57.34	NM	NA	3379.10
MW023	06/07/2004	3436.44	57.21	NM	NA	3379.23
MW023	09/17/2004	3436.44	57.34	NM	NA	3379.10
MW023	11/30/2004	3436.44	57.16	NM	NA	3379.28
MW023	03/31/2005	3436.44	56.92	NM	NA	3379.52
MW023	05/23/2005	3436.44	56.68	NM	NA	3379.76
MW023	01/17/2006	3436.44	56.37	NM	NA	3380.07
MW023	06/14/2006	3436.44	56.00	NM	NA	3380.44
MW023	04/18/2007	3436.44	55.64	NM	NA	3380.80
MW023	09/20/2007	3436.44	55.46	NM	NA	3380.98
MW023	04/09/2008	3436.44	55.31	NM	NA	3381.13
MW023	08/04/2008	3436.44	55.40	NM	NA	3381.04
MW023	03/11/2009	3436.44	55.55	NM	NA	3380.89
MW023	07/29/2009	3436.44	55.55	NM	NA	3380.89
MW023	03/01/2010	3436.44	55.66	NM	NA	3380.78
MW023	08/03/2010	3436.44	55.51	NM	NA	3380.93
MW023	05/05/2011	3436.44	55.26	NM	NA	3381.18
MW023	11/01/2011	3436.44	55.53	NM	NA	3380.91
MW023	05/24/2012	3436.44	55.63	NM	NA	3380.81
MW023	10/25/2012	3436.44	55.72	NM	NA	3380.72
MW023	05/01/2013	3436.44	55.80	NM	NA	3380.64
MW023	10/28/2013	3436.44	55.81	NM	NA	3380.63
MW023	05/05/2014	3436.44	55.91	NM	NA	3380.53
MW023	11/03/2014	3436.44	55.88	NM	NA	3380.56
MW023	05/06/2015	3436.44	55.64	NM	NA	3380.80
MW023	11/02/2015	3436.44	55.33	NM	NA	3381.11
MW023	05/11/2016	3436.44	55.46	NM	NA	3380.98
MW023	09/22/2016	3436.44	55.49	NM	NA	3380.95
MW023	05/02/2017	3436.44	55.07	NM	NA	3381.37
MW023	09/18/2017	3436.44	55.06	NM	NA	3381.38
MW023	03/20/2018	3436.44	54.92	NM	NA	3381.52
MW023	09/13/2018	3436.44	54.87	NM	NA	3381.57
MW023	04/10/2019	3436.44	54.69	NM	NA	3381.75
MW023	10/07/2019	3436.44	54.85	NM	NA	3381.59
MW023A	01/09/2003	3436.26	57.70	NM	NA	3378.56
MW023A	01/30/2003	3436.26	57.23	NM	NA	3379.03
MW023A	03/28/2003	3436.26	57.33	NM	NA	3378.93
MW023A	05/19/2003	3436.26	57.25	NM	NA	3379.01
MW023A	09/09/2003	3436.26	53.23	NM	NA	3383.03
MW023A	12/02/2003	3436.26	57.23	NM	NA	3379.03
MW023A	03/30/2004	3436.26	57.25	NM	NA	3379.01
MW023A	06/07/2004	3436.26	57.35	NM	NA	3378.91
MW023A	09/17/2004	3436.26	57.14	NM	NA	3379.12
MW023A	11/30/2004	3436.26	57.11	NM	NA	3379.15
MW023A	03/31/2005	3436.26	56.62	NM	NA	3379.64
MW023A	05/23/2005	3436.26	56.46	NM	NA	3379.80
MW023A	01/17/2006	3436.26	56.09	NM	NA	3380.17
MW023A	06/14/2006	3436.26	55.80	NM	NA	3380.46
MW023A	03/29/2007	3436.26	53.38	NM	NA	3382.88
MW023A	09/11/2007	3436.26	55.29	NM	NA	3380.97
MW023A	03/18/2008	3436.26	55.11	NM	NA	3381.15
MW023A	08/04/2008	3436.26	55.18	NM	NA	3381.08
MW023A	03/10/2009	3436.26	55.22	NM	NA	3381.04
MW023A	07/28/2009	3436.26	55.32	NM	NA	3380.94
MW023A	03/01/2010	3436.26	55.40	NM	NA	3380.86
MW023A	08/03/2010	3436.26	55.62	NM	NA	3380.64

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW023A	05/03/2011	3436.26	56.52	NM	NA	3379.74
MW023A	11/02/2011	3436.26	55.39	NM	NA	3380.87
MW023A	05/04/2012	3436.26	55.43	NM	NA	3380.83
MW023A	10/25/2012	3436.26	55.56	NM	NA	3380.70
MW023A	05/01/2013	3436.26	55.62	NM	NA	3380.64
MW023A	10/29/2013	3436.26	55.68	NM	NA	3380.58
MW023A	05/05/2014	3436.26	55.80	NM	NA	3380.46
MW023A	11/03/2014	3436.26	55.75	NM	NA	3380.51
MW023A	05/06/2015	3436.26	55.49	NM	NA	3380.77
MW023A	11/02/2015	3436.26	55.54	NM	NA	3380.72
MW023A	05/11/2016	3436.26	55.40	NM	NA	3380.86
MW023A	09/22/2016	3436.26	55.25	NM	NA	3381.01
MW023A	05/02/2017	3436.26	54.94	NM	NA	3381.32
MW024	01/09/2003	3431.32	53.76	NM	NA	3377.56
MW024	01/29/2003	3431.32	53.64	NM	NA	3377.68
MW024	03/27/2003	3431.32	53.85	NM	NA	3377.47
MW024	05/19/2003	3431.32	53.77	NM	NA	3377.55
MW024	09/09/2003	3431.32	53.93	NM	NA	3377.39
MW024	12/02/2003	3431.32	53.86	NM	NA	3377.46
MW024	03/30/2004	3431.32	54.10	NM	NA	3377.22
MW024	06/07/2004	3431.32	54.21	NM	NA	3377.11
MW024	09/16/2004	3431.32	53.71	NM	NA	3377.61
MW024	11/29/2004	3431.32	53.54	NM	NA	3377.78
MW024	03/31/2005	3431.32	53.06	NM	NA	3378.26
MW024	05/23/2005	3431.32	52.78	NM	NA	3378.54
MW024	01/17/2006	3431.32	52.11	NM	NA	3379.21
MW024	06/14/2006	3431.32	51.60	NM	NA	3379.72
MW024	04/11/2007	3431.32	51.33	NM	NA	3379.99
MW024	09/13/2007	3431.32	51.44	NM	NA	3379.88
MW024	03/19/2008	3431.32	51.45	NM	NA	3379.87
MW024	08/04/2008	3431.32	51.52	NM	NA	3379.80
MW024	03/11/2009	3431.22	51.69	NM	NA	3379.53
MW024	07/29/2009	3431.22	51.74	NM	NA	3379.48
MW024	03/01/2010	3431.22	51.78	NM	NA	3379.44
MW024	08/02/2010	3431.22	51.81	NM	NA	3379.41
MW024	05/04/2011	3431.22	51.60	NM	NA	3379.62
MW024	11/01/2011	3431.32	51.77	NM	NA	3379.55
MW024	05/01/2012	3431.32	51.76	NM	NA	3379.56
MW024	10/24/2012	3431.32	51.89	NM	NA	3379.43
MW024	05/01/2013	3431.32	52.10	NM	NA	3379.22
MW024	10/28/2013	3431.32	52.23	NM	NA	3379.09
MW024	05/05/2014	3431.32	52.24	NM	NA	3379.08
MW024	11/03/2014	3431.32	52.20	NM	NA	3379.12
MW024	05/06/2015	3431.32	51.87	NM	NA	3379.45
MW024	11/03/2015	3431.32	51.85	NM	NA	3379.47
MW024	05/10/2016	3431.32	51.71	NM	NA	3379.61
MW024	09/22/2016	3431.32	51.66	NM	NA	3379.66
MW024	05/02/2017	3431.32	51.32	NM	NA	3380.00
MW024A	11/16/1999	3430.77	54.30	NM	NA	3376.47
MW024A	05/15/2001	3430.77	53.32	NM	NA	3377.45
MW024A	08/23/2001	3430.77	53.86	NM	NA	3376.91
MW024A	02/06/2002	3430.77	53.42	NM	NA	3377.35
MW024A	09/03/2002	3430.77	53.26	NM	NA	3377.51
MW024A	12/02/2002	3430.77	53.03	NM	NA	3377.74
MW024A	01/29/2003	3430.77	53.11	NM	NA	3377.66
MW024A	03/27/2003	3430.77	53.31	NM	NA	3377.46
MW024A	05/19/2003	3430.77	53.22	NM	NA	3377.55
MW024A	09/09/2003	3430.77	53.73	NM	NA	3377.04
MW024A	12/02/2003	3430.77	53.69	NM	NA	3377.08
MW024A	03/30/2004	3430.77	53.87	NM	NA	3376.90
MW024A	06/07/2004	3430.77	53.89	NM	NA	3376.88
MW024A	09/16/2004	3430.77	53.11	NM	NA	3377.66
MW024A	11/29/2004	3430.77	53.04	NM	NA	3377.73
MW024A	03/31/2005	3430.77	52.50	NM	NA	3378.27
MW024A	05/23/2005	3430.77	52.26	NM	NA	3378.51
MW024A	01/17/2006	3430.77	51.43	NM	NA	3379.34
MW024A	06/14/2006	3430.77	50.90	NM	NA	3379.87
MW024A	04/11/2007	3430.77	50.82	NM	NA	3379.95
MW024A	09/18/2007	3430.77	50.88	NM	NA	3379.89
MW024A	03/19/2008	3430.77	50.88	NM	NA	3379.89

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW024A	08/04/2008	3430.77	50.98	NM	NA	3379.79
MW024A	03/11/2009	3430.77	51.15	NM	NA	3379.62
MW024A	07/29/2009	3430.77	51.17	NM	NA	3379.60
MW024A	03/01/2010	3430.77	51.22	NM	NA	3379.55
MW024A	08/02/2010	3430.77	51.24	NM	NA	3379.53
MW024A	05/03/2011	3430.77	51.07	NM	NA	3379.70
MW024A	11/02/2011	3430.77	51.22	NM	NA	3379.55
MW024A	05/01/2012	3430.77	51.20	NM	NA	3379.57
MW024A	10/24/2012	3430.77	51.35	NM	NA	3379.42
MW024A	05/01/2013	3430.77	51.54	NM	NA	3379.23
MW024A	10/29/2013	3430.77	51.64	NM	NA	3379.13
MW024A	05/05/2014	3430.77	51.70	NM	NA	3379.07
MW024A	11/03/2014	3430.77	51.60	NM	NA	3379.17
MW024A	05/06/2015	3430.77	51.32	NM	NA	3379.45
MW024A	11/03/2015	3430.77	51.31	NM	NA	3379.46
MW024A	05/10/2016	3430.77	51.14	NM	NA	3379.63
MW024A	09/22/2016	3430.77	51.14	NM	NA	3379.63
MW024A	05/02/2017	3430.77	50.79	NM	NA	3379.98
MW024A	09/18/2017	3430.77	50.71	NM	NA	3380.06
MW024A	03/20/2018	3430.77	54.58	NM	NA	3376.19
MW024A	09/12/2018	3430.77	50.67	NM	NA	3380.10
MW024A	04/09/2019	3430.77	50.37	NM	NA	3380.40
MW024A	10/07/2019	3430.77	50.57	NM	NA	3380.20
MW025	11/16/1999	3432.69	53.23	NM	NA	3379.46
MW025	05/15/2001	3432.69	53.24	NM	NA	3379.45
MW025	08/23/2001	3432.69	53.02	NM	NA	3379.67
MW025	01/21/2002	3432.69	53.03	NM	NA	3379.66
MW025	04/05/2002	3432.69	53.17	NM	NA	3379.52
MW025	09/03/2002	3432.69	53.01	NM	NA	3379.68
MW025	12/02/2002	3432.69	52.83	NM	NA	3379.86
MW025	01/29/2003	3432.69	52.80	NM	NA	3379.89
MW025	03/28/2003	3432.69	52.86	NM	NA	3379.83
MW025	05/19/2003	3432.69	52.59	NM	NA	3380.10
MW025	09/09/2003	3432.69	52.62	NM	NA	3380.07
MW025	12/02/2003	3432.69	52.55	NM	NA	3380.14
MW025	03/30/2004	3432.69	52.70	NM	NA	3379.99
MW025	06/07/2004	3432.69	52.62	NM	NA	3380.07
MW025	09/16/2004	3432.69	52.48	NM	NA	3380.21
MW025	11/29/2004	3432.69	52.41	NM	NA	3380.28
MW025	03/31/2005	3432.69	52.10	NM	NA	3380.59
MW025	05/23/2005	3432.69	51.88	NM	NA	3380.81
MW025	01/17/2006	3432.69	51.43	NM	NA	3381.26
MW025	06/16/2006	3432.69	51.40	NM	NA	3381.29
MW025	03/22/2007	3432.69	50.04	NM	NA	3382.65
MW025	09/18/2007	3432.69	50.89	NM	NA	3381.80
MW025	03/18/2008	3432.69	50.85	NM	NA	3381.84
MW025	08/04/2008	3432.69	51.10	NM	NA	3381.59
MW025	03/10/2009	3432.69	51.12	NM	NA	3381.57
MW025	07/28/2009	3432.69	51.31	NM	NA	3381.38
MW025	03/01/2010	3432.69	51.41	NM	NA	3381.28
MW025	08/03/2010	3432.69	51.41	NM	NA	3381.28
MW025	05/03/2011	3432.69	51.30	NM	NA	3381.39
MW025	11/01/2011	3432.64	51.25	NM	NA	3381.39
MW025	05/01/2012	3432.64	51.38	NM	NA	3381.26
MW025	10/25/2012	3432.64	51.53	NM	NA	3381.11
MW025	04/30/2013	3432.64	51.58	NM	NA	3381.06
MW026	11/16/1999	3432.04	52.95	NM	NA	3379.09
MW026	05/15/2001	3432.04	52.08	NM	NA	3379.96
MW026	08/23/2001	3432.04	52.06	NM	NA	3379.98
MW026	01/21/2002	3432.04	51.91	NM	NA	3380.13
MW026	04/04/2002	3432.04	52.00	NM	NA	3380.04
MW026	09/03/2002	3432.04	51.99	NM	NA	3380.05
MW026	12/02/2002	3432.04	51.60	NM	NA	3380.44
MW026	01/30/2003	3432.04	51.43	NM	NA	3380.61
MW026	03/28/2003	3432.04	51.62	NM	NA	3380.42
MW026	05/19/2003	3432.04	51.52	NM	NA	3380.52
MW026	09/08/2003	3432.04	51.64	NM	NA	3380.40
MW026	12/02/2003	3432.04	51.49	NM	NA	3380.55
MW026	03/30/2004	3432.04	51.70	NM	NA	3380.34
MW026	06/07/2004	3432.04	51.69	NM	NA	3380.35

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW026	09/16/2004	3432.04	51.62	NM	NA	3380.42
MW026	11/30/2004	3432.04	51.56	NM	NA	3380.48
MW026	03/31/2005	3432.04	51.03	NM	NA	3381.01
MW026	05/23/2005	3432.04	50.79	NM	NA	3381.25
MW026	01/17/2006	3432.04	50.43	NM	NA	3381.61
MW026	06/15/2006	3432.04	50.23	NM	NA	3381.81
MW026	04/05/2007	3432.04	51.12	NM	NA	3380.92
MW026	09/10/2007	3432.04	49.84	NM	NA	3382.20
MW026	03/18/2008	3432.04	49.74	NM	NA	3382.30
MW026	08/04/2008	3432.04	49.80	NM	NA	3382.24
MW026	03/10/2009	3432.04	50.25	NM	NA	3381.79
MW026	07/28/2009	3432.04	50.52	NM	NA	3381.52
MW026	03/01/2010	3432.04	50.75	NM	NA	3381.29
MW026	08/02/2010	3432.04	52.85	NM	NA	3379.19
MW026	05/03/2011	3432.04	50.76	NM	NA	3381.28
MW026	11/01/2011	3432.04	50.78	NM	NA	3381.26
MW026	05/03/2012	3432.04	50.83	NM	NA	3381.21
MW026	10/25/2012	3432.04	51.08	NM	NA	3380.96
MW026	04/30/2013	3432.04	50.90	NM	NA	3381.14
MW026	10/29/2013	3432.04	50.82	NM	NA	3381.22
MW026	05/05/2014	3432.04	51.15	NM	NA	3380.89
MW026	11/03/2014	3432.04	51.20	NM	NA	3380.84
MW026	05/06/2015	3432.04	50.89	NM	NA	3381.15
MW026	11/03/2015	3432.04	50.90	NM	NA	3381.14
MW026	05/09/2016	3432.04	50.63	NM	NA	3381.41
MW026	09/22/2016	3432.04	50.62	NM	NA	3381.42
MW026	09/18/2017	3432.04	50.07	NM	NA	3381.97
MW026	03/20/2018	3432.04	49.84	NM	NA	3382.20
MW026	09/13/2018	3432.04	49.8	NM	NA	3382.24
MW026	04/16/2019	3432.04	NM	NM	NA	NM
MW026	10/08/2019	3432.04	49.60	NM	NA	3382.44
MW027	11/16/1999	3443.33	64.65	NM	NA	3378.68
MW027	05/15/2001	3443.33	64.09	NM	NA	3379.24
MW027	08/23/2001	3443.33	63.82	NM	NA	3379.51
MW027	01/21/2002	3443.33	63.87	NM	NA	3379.46
MW027	04/04/2002	3443.33	63.90	NM	NA	3379.43
MW027	09/03/2002	3443.33	63.90	NM	NA	3379.43
MW027	12/02/2002	3443.33	63.64	NM	NA	3379.69
MW027	01/30/2003	3443.33	63.59	NM	NA	3379.74
MW027	03/27/2003	3443.33	63.49	NM	NA	3379.84
MW027	05/19/2003	3443.33	63.63	NM	NA	3379.70
MW027	09/08/2003	3443.33	63.58	NM	NA	3379.75
MW027	12/02/2003	3443.33	63.48	NM	NA	3379.85
MW027	03/30/2004	3443.33	63.62	NM	NA	3379.71
MW027	06/07/2004	3443.33	63.67	NM	NA	3379.66
MW027	09/16/2004	3443.33	63.55	NM	NA	3379.78
MW027	11/29/2004	3443.33	63.48	NM	NA	3379.85
MW027	03/31/2005	3443.33	62.98	NM	NA	3380.35
MW027	05/23/2005	3443.33	62.73	NM	NA	3380.60
MW027	01/17/2006	3443.33	62.39	NM	NA	3380.94
MW027	06/16/2006	3443.33	62.32	NM	NA	3381.01
MW027	03/21/2007	3443.33	62.13	NM	NA	3381.20
MW027	09/13/2007	3443.33	62.04	NM	NA	3381.29
MW027	03/18/2008	3443.33	61.99	NM	NA	3381.34
MW027	08/04/2008	3443.33	62.14	NM	NA	3381.19
MW027	07/29/2009	3443.33	62.52	NM	NA	3380.81
MW027	03/01/2010	3443.33	62.73	NM	NA	3380.60
MW027	08/02/2010	3443.33	62.84	NM	NA	3380.49
MW027	05/03/2011	3443.33	62.57	NM	NA	3380.76
MW027	11/01/2011	3443.33	62.57	NM	NA	3380.76
MW027	05/17/2012	3443.33	62.65	NM	NA	3380.68
MW027	10/24/2012	3443.33	62.67	NM	NA	3380.66
MW027	04/30/2013	3443.33	62.80	NM	NA	3380.53
MW027	10/29/2013	3443.33	62.99	NM	NA	3380.34
MW027	05/05/2014	3443.33	62.87	NM	NA	3380.46
MW027	11/03/2014	3443.33	62.90	NM	NA	3380.43
MW027	05/06/2015	3443.33	62.65	NM	NA	3380.68
MW027	11/03/2015	3443.33	62.70	NM	NA	3380.63
MW027	05/09/2016	3443.33	62.55	NM	NA	3380.78
MW027	09/22/2016	3443.33	62.47	NM	NA	3380.86

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW027	05/02/2017	3443.33	62.05	NM	NA	3381.28
MW027	09/18/2017	3443.33	62.1	NM	NA	3381.23
MW027	03/20/2018	3443.33	61.89	NM	NA	3381.44
MW027	09/13/2018	3443.33	61.88	NM	NA	3381.45
MW027	04/16/2019	3443.33	62.91	NM	NA	3380.42
MW027	10/07/2019	3443.33	61.89	NM	NA	3381.44
MW028	11/16/1999	3451.63	73.52	NM	NA	3378.11
MW028	05/15/2001	3451.63	72.89	NM	NA	3378.74
MW028	08/23/2001	3451.63	72.86	NM	NA	3378.77
MW028	01/21/2002	3451.63	72.75	NM	NA	3378.88
MW028	04/05/2002	3451.63	72.77	NM	NA	3378.86
MW028	09/03/2002	3451.63	72.71	NM	NA	3378.92
MW028	12/02/2002	3451.63	72.55	NM	NA	3379.08
MW028	01/29/2003	3451.63	72.51	NM	NA	3379.12
MW028	03/28/2003	3451.63	72.58	NM	NA	3379.05
MW028	05/19/2003	3451.63	72.52	NM	NA	3379.11
MW028	09/09/2003	3451.63	72.53	NM	NA	3379.10
MW028	01/28/2004	3451.63	72.53	NM	NA	3379.10
MW028	03/30/2004	3451.63	72.36	NM	NA	3379.27
MW028	06/07/2004	3451.63	72.25	NM	NA	3379.38
MW028	09/17/2004	3451.63	72.28	NM	NA	3379.35
MW028	11/29/2004	3451.63	71.89	NM	NA	3379.74
MW028	04/01/2005	3451.63	71.71	NM	NA	3379.92
MW028	05/23/2005	3451.63	71.55	NM	NA	3380.08
MW028	01/17/2006	3451.63	71.10	NM	NA	3380.53
MW028	06/14/2006	3451.63	71.16	NM	NA	3380.47
MW028	03/21/2007	3451.63	70.91	NM	NA	3380.72
MW028	09/05/2007	3451.63	70.61	NM	NA	3381.02
MW028	03/18/2008	3451.63	70.68	NM	NA	3380.95
MW028	08/04/2008	3451.63	69.96	NM	NA	3381.67
MW028	03/10/2009	3451.63	70.70	NM	NA	3380.93
MW028	07/28/2009	3451.63	70.89	NM	NA	3380.74
MW028	03/01/2010	3451.63	70.92	NM	NA	3380.71
MW028	08/02/2010	3451.63	70.66	NM	NA	3380.97
MW028	05/03/2011	3451.63	70.66	NM	NA	3380.97
MW028	11/01/2011	3451.63	70.76	NM	NA	3380.87
MW028	05/24/2012	3451.63	70.92	NM	NA	3380.71
MW028	10/24/2012	3451.63	70.92	NM	NA	3380.71
MW028	04/30/2013	3451.63	71.00	NM	NA	3380.63
MW029	11/16/1999	3446.89	68.62	NM	NA	3378.27
MW029	05/15/2001	3446.89	68.12	NM	NA	3378.77
MW029	08/30/2001	3446.89	68.47	NM	NA	3378.42
MW029	02/06/2002	3446.89	67.97	NM	NA	3378.92
MW029	09/03/2002	3446.89	67.86	NM	NA	3379.03
MW029	12/02/2002	3446.89	67.70	NM	NA	3379.19
MW029	01/29/2003	3446.89	67.73	NM	NA	3379.16
MW029	03/27/2003	3446.89	67.66	NM	NA	3379.23
MW029	05/19/2003	3446.89	67.63	NM	NA	3379.26
MW029	09/09/2003	3446.89	67.68	NM	NA	3379.21
MW029	12/02/2003	3446.89	67.59	NM	NA	3379.30
MW029	03/30/2004	3446.89	67.50	NM	NA	3379.39
MW029	06/07/2004	3446.89	67.53	NM	NA	3379.36
MW029	06/16/2004	3446.89	67.49	NM	NA	3379.40
MW029	11/29/2004	3446.89	67.58	NM	NA	3379.31
MW029	03/31/2005	3446.89	67.33	NM	NA	3379.56
MW029	05/23/2005	3446.89	67.15	NM	NA	3379.74
MW029	01/17/2006	3446.89	66.99	NM	NA	3379.90
MW029	06/14/2006	3446.89	66.75	NM	NA	3380.14
MW029	03/28/2007	3446.89	66.46	NM	NA	3380.43
MW029	09/05/2007	3446.89	66.25	NM	NA	3380.64
MW029	03/18/2008	3446.89	66.09	NM	NA	3380.80
MW029	08/04/2008	3446.89	65.98	NM	NA	3380.91
MW029	03/10/2009	3446.89	65.97	NM	NA	3380.92
MW029	07/28/2009	3446.89	65.92	NM	NA	3380.97
MW029	03/01/2010	3446.89	66.00	NM	NA	3380.89
MW029	08/02/2010	3446.89	65.96	NM	NA	3380.93
MW029	05/04/2011	3446.89	65.85	NM	NA	3381.04
MW029	11/01/2011	3446.89	65.81	NM	NA	3381.08
MW029	05/01/2012	3446.89	65.80	NM	NA	3381.09
MW029	10/24/2012	3446.89	65.80	NM	NA	3381.09

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW029	05/01/2013	3446.89	65.91	NM	NA	3380.98
MW030	04/24/2002	3439.84	61.42	NM	NA	3378.42
MW030	05/07/2002	3439.84	61.30	NM	NA	3378.54
MW030	09/03/2002	3439.84	61.39	NM	NA	3378.45
MW030	12/02/2002	3439.84	61.18	NM	NA	3378.66
MW030	01/29/2003	3439.84	61.80	NM	NA	3378.04
MW030	03/27/2003	3439.84	61.14	NM	NA	3378.70
MW030	05/19/2003	3439.84	61.16	NM	NA	3378.68
MW030	09/09/2003	3439.84	61.16	NM	NA	3378.68
MW030	12/02/2003	3439.84	61.06	NM	NA	3378.78
MW030	03/30/2004	3439.84	61.04	NM	NA	3378.80
MW030	06/07/2004	3439.84	61.03	NM	NA	3378.81
MW030	09/17/2004	3439.84	61.06	NM	NA	3378.78
MW030	11/29/2004	3439.84	61.08	NM	NA	3378.76
MW030	03/31/2005	3439.84	60.80	NM	NA	3379.04
MW030	05/23/2005	3439.84	60.60	NM	NA	3379.24
MW030	01/17/2006	3439.84	60.28	NM	NA	3379.56
MW030	06/14/2006	3439.84	59.99	NM	NA	3379.85
MW030	03/28/2007	3439.84	59.58	NM	NA	3380.26
MW030	09/10/2007	3439.84	59.40	NM	NA	3380.44
MW030	03/18/2008	3439.84	58.20	NM	NA	3381.64
MW030	08/04/2008	3439.84	59.14	NM	NA	3380.70
MW030	03/10/2009	3439.84	59.25	NM	NA	3380.59
MW030	07/28/2009	3439.84	59.24	NM	NA	3380.60
MW030	03/01/2010	3439.84	59.32	NM	NA	3380.52
MW030	08/02/2010	3439.84	59.32	NM	NA	3380.52
MW030	05/04/2011	3439.84	59.23	NM	NA	3380.61
MW030	11/01/2011	3439.84	59.17	NM	NA	3380.67
MW030	05/01/2012	3439.84	59.17	NM	NA	3380.67
MW030	10/24/2012	3439.84	59.20	NM	NA	3380.64
MW030	05/01/2013	3439.84	59.39	NM	NA	3380.45
MW030	10/28/2013	3439.84	59.42	NM	NA	3380.42
MW030	05/05/2014	3439.84	59.47	NM	NA	3380.37
MW030	11/03/2014	3439.84	59.51	NM	NA	3380.33
MW030	05/06/2015	3439.84	59.30	NM	NA	3380.54
MW030	11/03/2015	3439.84	59.23	NM	NA	3380.61
MW030	05/10/2016	3439.84	59.15	NM	NA	3380.69
MW030	09/22/2016	3439.84	59.13	NM	NA	3380.71
MW030	05/02/2017	3439.84	58.94	NM	NA	3380.90
MW030	09/18/2017	3439.84	58.87	NM	NA	3380.97
MW030	03/20/2018	3439.84	58.73	NM	NA	3381.11
MW030	09/13/2018	3439.84	58.7	NM	NA	3381.14
MW030	04/10/2019	3439.84	58.51	NM	NA	3381.33
MW030	10/07/2019	3439.84	58.60	NM	NA	3381.24
MW030P	05/05/2014	NM	49.31	NM	NA	NM
MW030P	11/03/2014	NM	48.80	NM	NA	NM
MW030P	05/05/2015	NM	48.50	NM	NA	NM
MW030P	11/02/2015	NM	48.54	NM	NA	NM
MW030P	05/08/2016	NM	48.29	NM	NA	NM
MW030P	05/12/2016	NM	48.29	NM	NA	NM
MW030P	09/14/2016	NM	48.27	NM	NA	NM
MW030P	05/02/2017	NM	47.60	NM	NA	NM
MW031	04/25/2002	3440.68	61.80	NM	NA	3378.88
MW031	05/07/2002	3440.68	61.85	NM	NA	3378.83
MW031	09/03/2002	3440.68	61.88	NM	NA	3378.80
MW031	12/02/2002	3440.68	61.73	NM	NA	3378.95
MW031	01/29/2003	3440.68	61.71	NM	NA	3378.97
MW031	03/27/2003	3440.68	61.65	NM	NA	3379.03
MW031	05/19/2003	3440.68	61.67	NM	NA	3379.01
MW031	09/09/2003	3440.68	61.68	NM	NA	3379.00
MW031	12/02/2003	3440.68	61.50	NM	NA	3379.18
MW031	03/30/2004	3440.68	61.53	NM	NA	3379.15
MW031	06/07/2004	3440.68	61.51	NM	NA	3379.17
MW031	09/16/2004	3440.68	61.48	NM	NA	3379.20
MW031	11/29/2004	3440.68	61.43	NM	NA	3379.25
MW031	03/31/2005	3440.68	61.04	NM	NA	3379.64
MW031	05/23/2005	3440.68	60.96	NM	NA	3379.72
MW031	01/17/2006	3440.68	60.74	NM	NA	3379.94
MW031	06/14/2006	3440.68	60.53	NM	NA	3380.15
MW031	03/28/2007	3440.68	60.24	NM	NA	3380.44

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW031	09/10/2007	3440.68	60.00	NM	NA	3380.68
MW031	03/18/2008	3440.68	59.89	NM	NA	3380.79
MW031	08/04/2008	3440.68	59.90	NM	NA	3380.78
MW031	03/10/2009	3440.68	59.86	NM	NA	3380.82
MW031	07/28/2009	3440.68	59.58	NM	NA	3381.10
MW031	03/01/2010	3440.68	60.04	NM	NA	3380.64
MW031	08/02/2010	3440.68	60.04	NM	NA	3380.64
MW031	05/04/2011	3440.68	59.89	NM	NA	3380.79
MW031	11/01/2011	3440.68	59.79	NM	NA	3380.89
MW031	05/01/2012	3440.68	59.88	NM	NA	3380.80
MW031	10/24/2012	3440.68	59.91	NM	NA	3380.77
MW031	05/01/2013	3440.68	60.08	NM	NA	3380.60
MW031	10/28/2013	3440.68	60.03	NM	NA	3380.65
MW031	05/05/2014	3440.68	60.13	NM	NA	3380.55
MW031	11/03/2014	3440.68	60.15	NM	NA	3380.53
MW031	05/06/2015	3440.68	60.00	NM	NA	3380.68
MW031	11/03/2015	3440.68	59.88	NM	NA	3380.80
MW031	05/09/2016	3440.68	59.83	NM	NA	3380.85
MW031	09/22/2016	3440.68	59.92	NM	NA	3380.76
MW031	05/02/2017	3442.13	59.68	NM	NA	3382.45
MW031	09/18/2017	3440.68	59.58	NM	NA	3381.10
MW031	03/20/2018	3440.68	59.48	NM	NA	3381.20
MW031	09/13/2018	3440.68	59.42	NM	NA	3381.26
MW031	04/10/2019	3440.68	59.22	NM	NA	3381.46
MW031	10/07/2019	3440.68	59.46	NM	NA	3381.22
MW032	04/04/2002	3442.22	62.71	NM	NA	3379.51
MW032	09/03/2002	3442.22	62.61	NM	NA	3379.61
MW032	12/02/2002	3442.22	62.40	NM	NA	3379.82
MW032	01/31/2003	3442.22	62.55	NM	NA	3379.67
MW032	03/27/2003	3442.22	62.32	NM	NA	3379.90
MW032	05/19/2003	3442.22	62.37	NM	NA	3379.85
MW032	09/09/2003	3442.22	62.38	NM	NA	3379.84
MW032	12/02/2003	3442.22	62.23	NM	NA	3379.99
MW032	03/30/2004	3442.22	62.30	NM	NA	3379.92
MW032	06/07/2004	3442.22	62.28	NM	NA	3379.94
MW032	09/16/2004	3442.22	62.14	NM	NA	3380.08
MW032	03/31/2005	3442.22	61.54	NM	NA	3380.68
MW032	05/23/2005	3442.22	61.35	NM	NA	3380.87
MW032	01/17/2006	3442.22	60.93	NM	NA	3381.29
MW032	06/15/2006	3442.22	60.92	NM	NA	3381.30
MW032	04/13/2007	3442.22	60.75	NM	NA	3381.47
MW032	09/06/2007	3442.22	60.52	NM	NA	3381.70
MW032	03/19/2008	3442.22	60.59	NM	NA	3381.63
MW032	08/04/2008	3442.22	60.85	NM	NA	3381.37
MW032	03/10/2009	3442.22	60.82	NM	NA	3381.40
MW032	07/28/2009	3442.22	61.02	NM	NA	3381.20
MW032	03/01/2010	3442.22	61.06	NM	NA	3381.16
MW032	08/02/2010	3442.22	61.72	NM	NA	3380.50
MW032	08/03/2010	3442.22	47.79	NM	NA	3394.43
MW032	05/03/2011	3442.22	60.91	NM	NA	3381.31
MW032	11/01/2011	3442.22	62.91	NM	NA	3379.31
MW032	05/24/2012	3442.22	61.12	NM	NA	3381.10
MW032	10/24/2012	3442.22	61.08	NM	NA	3381.14
MW032	04/30/2013	3442.22	61.20	NM	NA	3381.02
MW032	10/29/2013	3442.22	61.33	NM	NA	3380.89
MW032	05/05/2014	3442.22	61.27	NM	NA	3380.95
MW032	11/03/2014	3442.22	61.20	NM	NA	3381.02
MW032	05/06/2015	3442.22	61.07	NM	NA	3381.15
MW032	11/03/2015	3442.22	61.00	NM	NA	3381.22
MW032	05/09/2016	3442.22	61.00	NM	NA	3381.22
MW032	09/22/2016	3442.22	61.00	NM	NA	3381.22
MW032	05/02/2017	3442.22	60.57	NM	NA	3381.65
MW032	09/18/2017	3442.22	60.61	NM	NA	3381.61
MW032	03/20/2018	3442.22	60.41	NM	NA	3381.81
MW032	09/13/2018	3442.22	60.36	NM	NA	3381.86
MW032	04/10/2019	3442.22	60.13	NM	NA	3382.09
MW032	10/08/2019	3442.22	60.15	NM	NA	3382.07
MW033	04/04/2002	3428.86	48.95	NM	NA	3379.91
MW033	09/03/2002	3428.86	48.86	NM	NA	3380.00
MW033	12/05/2002	3428.86	48.76	NM	NA	3380.10

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW033	01/31/2003	3428.86	48.63	NM	NA	3380.23
MW033	03/27/2003	3428.86	48.50	NM	NA	3380.36
MW033	05/19/2003	3428.86	48.63	NM	NA	3380.23
MW033	09/09/2003	3428.86	48.59	NM	NA	3380.27
MW033	12/03/2003	3428.86	48.69	NM	NA	3380.17
MW033	03/30/2004	3428.86	49.78	NM	NA	3379.08
MW033	06/07/2004	3428.86	48.64	NM	NA	3380.22
MW033	09/16/2004	3428.86	48.51	NM	NA	3380.35
MW033	11/30/2004	3428.86	48.41	NM	NA	3380.45
MW033	04/01/2005	3428.86	48.24	NM	NA	3380.62
MW033	05/23/2005	3428.86	47.73	NM	NA	3381.13
MW033	01/17/2006	3428.86	47.27	NM	NA	3381.59
MW033	06/16/2006	3428.86	47.06	NM	NA	3381.80
MW033	04/23/2007	3428.86	46.85	NM	NA	3382.01
MW033	09/20/2007	3428.86	46.64	NM	NA	3382.22
MW033	03/18/2008	3428.86	46.62	NM	NA	3382.24
MW033	08/04/2008	3428.86	46.92	NM	NA	3381.94
MW033	03/11/2009	3428.86	47.19	NM	NA	3381.67
MW033	07/29/2009	3428.86	47.34	NM	NA	3381.52
MW033	03/01/2010	3428.86	47.47	NM	NA	3381.39
MW033	08/03/2010	3428.86	47.53	NM	NA	3381.33
MW033	05/03/2011	3428.86	47.40	NM	NA	3381.46
MW033	11/02/2011	3428.86	47.50	NM	NA	3381.36
MW033	05/24/2012	3428.86	47.56	NM	NA	3381.30
MW033	10/25/2012	3428.86	47.79	NM	NA	3381.07
MW033	04/30/2013	3428.86	47.78	NM	NA	3381.08
MW034	04/04/2002	3418.76	43.49	NM	NA	3375.27
MW034	09/03/2002	3418.76	43.43	NM	NA	3375.33
MW034	12/02/2002	3418.76	43.24	NM	NA	3375.52
MW034	01/30/2003	3418.76	43.31	NM	NA	3375.45
MW034	03/28/2003	3418.76	43.20	NM	NA	3375.56
MW034	05/19/2003	3418.76	43.24	NM	NA	3375.52
MW034	09/08/2003	3418.76	43.43	NM	NA	3375.33
MW034	12/02/2003	3418.76	43.37	NM	NA	3375.39
MW034	03/30/2004	3418.76	43.55	NM	NA	3375.21
MW034	06/07/2004	3418.76	43.50	NM	NA	3375.26
MW034	09/16/2004	3418.76	43.41	NM	NA	3375.35
MW034	11/29/2004	3418.76	43.71	NM	NA	3375.05
MW034	03/31/2005	3418.76	42.66	NM	NA	3376.10
MW034	05/23/2005	3418.76	42.52	NM	NA	3376.24
MW034	01/17/2006	3418.76	47.06	NM	NA	3371.70
MW034	06/19/2006	3418.76	41.70	NM	NA	3377.06
MW034	04/09/2007	3418.76	41.40	NM	NA	3377.36
MW034	03/19/2008	3418.76	41.35	NM	NA	3377.41
MW034	03/11/2009	3418.76	41.86	NM	NA	3376.90
MW034	03/01/2010	3418.76	41.95	NM	NA	3376.81
MW034	08/02/2010	3418.76	41.99	NM	NA	3376.77
MW034	05/04/2011	3418.76	41.96	NM	NA	3376.80
MW034	11/01/2011	3418.76	42.26	NM	NA	3376.50
MW034	05/08/2012	3418.76	42.33	NM	NA	3376.43
MW034	10/24/2012	3418.76	42.61	NM	NA	3376.15
MW034	04/30/2013	3418.76	42.76	NM	NA	3376.00
MW034	05/05/2014	3418.76	43.01	NM	NA	3375.75
MW034	11/03/2014	3418.76	42.61	NM	NA	3376.15
MW034	05/05/2015	3418.76	42.26	NM	NA	3376.50
MW034	11/02/2015	3418.76	42.34	NM	NA	3376.42
MW034	05/10/2016	3418.76	42.03	NM	NA	3376.73
MW034	09/15/2016	3418.76	42.11	NM	NA	3376.65
MW034	05/03/2017	3418.76	41.40	NM	NA	3377.36
MW035	08/23/2001	3427.39	50.49	NM	NA	3376.90
MW035	01/21/2002	3427.39	50.45	NM	NA	3376.94
MW035	04/04/2002	3427.39	50.58	NM	NA	3376.81
MW035	09/03/2002	3427.39	50.04	NM	NA	3377.35
MW035	12/02/2002	3427.39	50.03	NM	NA	3377.36
MW035	01/31/2003	3427.39	50.03	NM	NA	3377.36
MW035	03/28/2003	3427.39	50.19	NM	NA	3377.20
MW035	05/19/2003	3427.39	50.24	NM	NA	3377.15
MW035	09/09/2003	3427.39	50.35	NM	NA	3377.04
MW035	12/03/2003	3427.39	50.32	NM	NA	3377.07
MW035	03/30/2004	3427.39	50.52	NM	NA	3376.87

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW035	06/07/2004	3427.39	50.51	NM	NA	3376.88
MW035	09/17/2004	3427.39	49.98	NM	NA	3377.41
MW035	11/30/2004	3427.39	49.09	NM	NA	3378.30
MW035	03/31/2005	3427.39	49.02	NM	NA	3378.37
MW035	05/23/2005	3427.39	49.06	NM	NA	3378.33
MW035	01/17/2006	3427.39	48.44	NM	NA	3378.95
MW035	06/19/2006	3427.39	48.18	NM	NA	3379.21
MW035	04/02/2007	3427.39	47.91	NM	NA	3379.48
MW035	03/18/2008	3427.39	47.94	NM	NA	3379.45
MW035	03/10/2009	3427.39	48.45	NM	NA	3378.94
MW035	03/01/2010	3427.39	48.58	NM	NA	3378.81
MW035	08/02/2010	3427.39	48.44	NM	NA	3378.95
MW035	05/06/2011	3427.39	46.18	NM	NA	3381.21
MW035	11/01/2011	3427.39	48.79	NM	NA	3378.60
MW035	05/03/2012	3427.39	48.80	NM	NA	3378.59
MW035	10/24/2012	3427.39	49.16	NM	NA	3378.23
MW035	05/02/2013	3427.39	49.25	NM	NA	3378.14
MW036	08/23/2001	3425.49	48.36	NM	NA	3377.13
MW036	01/21/2002	3425.49	48.22	NM	NA	3377.27
MW036	04/04/2002	3425.49	48.24	NM	NA	3377.25
MW036	09/03/2002	3425.49	47.75	NM	NA	3377.74
MW036	12/02/2002	3425.49	47.78	NM	NA	3377.71
MW036	01/31/2003	3425.49	47.84	NM	NA	3377.65
MW036	03/28/2003	3425.49	47.91	NM	NA	3377.58
MW036	05/19/2003	3425.49	47.96	NM	NA	3377.53
MW036	09/09/2003	3425.49	48.12	NM	NA	3377.37
MW036	12/03/2003	3425.49	48.22	NM	NA	3377.27
MW036	03/30/2004	3425.49	48.37	NM	NA	3377.12
MW036	06/07/2004	3425.49	48.32	NM	NA	3377.17
MW036	09/17/2004	3425.49	47.86	NM	NA	3377.63
MW036	11/30/2004	3425.49	47.20	NM	NA	3378.29
MW036	04/01/2005	3425.49	46.89	NM	NA	3378.60
MW036	05/23/2005	3425.49	46.80	NM	NA	3378.69
MW036	01/17/2006	3425.49	46.11	NM	NA	3379.38
MW036	06/19/2006	3425.49	45.79	NM	NA	3379.70
MW036	04/19/2007	3425.49	45.52	NM	NA	3379.97
MW036	03/24/2008	3425.49	45.65	NM	NA	3379.84
MW036	03/11/2009	3425.49	46.18	NM	NA	3379.31
MW036	03/01/2010	3425.49	46.26	NM	NA	3379.23
MW036	08/03/2010	3425.49	46.37	NM	NA	3379.12
MW036	05/06/2011	3425.49	46.00	NM	NA	3379.49
MW036	11/02/2011	3425.49	46.22	NM	NA	3379.27
MW036	05/22/2012	3425.49	46.48	NM	NA	3379.01
MW036	10/24/2012	3425.49	46.82	NM	NA	3378.67
MW036	05/02/2013	3425.49	46.90	NM	NA	3378.59
MW036	10/29/2013	3425.49	47.15	NM	NA	3378.34
MW036	05/05/2014	3425.49	47.15	NM	NA	3378.34
MW036	11/03/2014	3425.49	46.80	NM	NA	3378.69
MW036	05/06/2015	3425.49	46.40	NM	NA	3379.09
MW036	09/16/2015	3425.49	46.21	NM	NA	3379.28
MW036	11/03/2015	3425.49	46.48	NM	NA	3379.01
MW036	05/12/2016	3425.49	46.24	NM	NA	3379.25
MW036	05/03/2017	3425.49	45.62	NM	NA	3379.87
MW037	08/23/2001	3423.71	46.60	NM	NA	3377.11
MW037	01/21/2002	3423.71	46.59	NM	NA	3377.12
MW037	04/04/2002	3423.71	46.62	NM	NA	3377.09
MW037	09/03/2002	3423.71	46.07	NM	NA	3377.64
MW037	12/02/2002	3423.71	46.17	NM	NA	3377.54
MW037	01/31/2003	3423.71	46.28	NM	NA	3377.43
MW037	03/28/2003	3423.71	46.29	NM	NA	3377.42
MW037	05/19/2003	3423.71	46.39	NM	NA	3377.32
MW037	09/09/2003	3423.71	46.52	NM	NA	3377.19
MW037	12/03/2003	3423.71	46.46	NM	NA	3377.25
MW037	03/30/2004	3423.71	47.76	NM	NA	3375.95
MW037	06/07/2004	3423.71	46.64	NM	NA	3377.07
MW037	09/17/2004	3423.71	46.18	NM	NA	3377.53
MW037	11/30/2004	3423.71	45.51	NM	NA	3378.20
MW037	04/01/2005	3423.71	45.34	NM	NA	3378.37
MW037	05/23/2005	3423.71	45.21	NM	NA	3378.50
MW037	01/18/2006	3423.71	44.46	NM	NA	3379.25

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW037	06/19/2006	3423.71	44.29	NM	NA	3379.42
MW037	04/19/2007	3423.71	44.05	NM	NA	3379.66
MW037	03/24/2008	3423.71	44.15	NM	NA	3379.56
MW037	03/11/2009	3423.71	45.74	NM	NA	3377.97
MW037	03/01/2010	3423.71	44.74	NM	NA	3378.97
MW037	05/06/2011	3423.71	44.55	NM	NA	3379.16
MW037	11/02/2011	3423.71	44.86	NM	NA	3378.85
MW037	05/03/2012	3423.71	45.00	NM	NA	3378.71
MW037	10/23/2012	3423.71	45.31	NM	NA	3378.40
MW037	05/01/2013	3423.71	45.43	NM	NA	3378.28
MW037	10/29/2013	3423.71	45.95	NM	NA	3377.76
MW037	05/05/2014	3423.71	45.71	NM	NA	3378.00
MW037	11/03/2014	3423.71	45.30	NM	NA	3378.41
MW037	05/06/2015	3423.71	44.94	NM	NA	3378.77
MW037	11/02/2015	3423.71	44.99	NM	NA	3378.72
MW037	05/02/2017	3423.71	43.98	NM	NA	3379.73
MW037	09/18/2017	3423.71	44.15	NM	NA	3379.56
MW037	03/20/2018	3423.71	43.86	NM	NA	3379.85
MW037	09/11/2018	3423.71	45.09	NM	NA	3378.62
MW037	04/10/2019	3423.71	43.52	NM	NA	3380.19
MW037	10/07/2019	3423.71	44.04	NM	NA	3379.67
MW038	08/23/2001	3425.23	47.85	NM	NA	3377.38
MW038	01/21/2002	3425.23	47.69	NM	NA	3377.54
MW038	04/04/2002	3425.23	47.81	NM	NA	3377.42
MW038	09/03/2002	3425.23	47.43	NM	NA	3377.80
MW038	12/02/2002	3425.23	47.30	NM	NA	3377.93
MW038	01/31/2003	3425.23	47.41	NM	NA	3377.82
MW038	03/28/2003	3425.23	47.51	NM	NA	3377.72
MW038	05/19/2003	3425.23	47.42	NM	NA	3377.81
MW038	09/09/2003	3425.23	47.61	NM	NA	3377.62
MW038	12/03/2003	3425.23	47.72	NM	NA	3377.51
MW038	03/30/2004	3425.23	47.80	NM	NA	3377.43
MW038	06/07/2004	3425.23	47.76	NM	NA	3377.47
MW038	09/17/2004	3425.23	47.44	NM	NA	3377.79
MW038	11/30/2004	3425.23	46.89	NM	NA	3378.34
MW038	04/01/2005	3425.23	46.54	NM	NA	3378.69
MW038	05/23/2005	3425.23	46.35	NM	NA	3378.88
MW038	01/17/2006	3425.23	45.61	NM	NA	3379.62
MW038	06/19/2006	3425.23	45.32	NM	NA	3379.91
MW038	04/19/2007	3425.23	45.09	NM	NA	3380.14
MW038	03/24/2008	3425.23	45.20	NM	NA	3380.03
MW038	03/11/2009	3425.23	45.73	NM	NA	3379.50
MW038	03/01/2010	3425.23	45.89	NM	NA	3379.34
MW038	08/02/2010	3425.23	45.93	NM	NA	3379.30
MW038	05/03/2011	3425.23	45.67	NM	NA	3379.56
MW038	11/02/2011	3425.23	45.63	NM	NA	3379.60
MW038	05/04/2012	3425.23	46.01	NM	NA	3379.22
MW038	10/23/2012	3425.23	46.29	NM	NA	3378.94
MW038	05/02/2013	3425.23	46.51	NM	NA	3378.72
MW038	10/29/2013	3425.23	46.64	NM	NA	3378.59
MW038	05/05/2014	3425.23	46.67	NM	NA	3378.56
MW038	11/03/2014	3425.23	46.29	NM	NA	3378.94
MW038	05/06/2015	3425.23	45.91	NM	NA	3379.32
MW038	09/16/2015	3425.23	45.75	NM	NA	3379.48
MW038	11/03/2015	3425.23	46.01	NM	NA	3379.22
MW038	05/12/2016	3425.23	45.78	NM	NA	3379.45
MW038	05/03/2017	3425.23	45.12	NM	NA	3380.11
MW039A	08/23/2001	3435.71	57.85	NM	NA	3377.86
MW039A	01/21/2002	3435.71	57.62	NM	NA	3378.09
MW039A	04/04/2002	3435.71	57.71	NM	NA	3378.00
MW039A	09/03/2002	3435.71	57.47	NM	NA	3378.24
MW039A	12/02/2002	3435.71	57.20	NM	NA	3378.51
MW039A	01/30/2003	3435.71	57.20	NM	NA	3378.51
MW039A	03/28/2003	3435.71	57.40	NM	NA	3378.31
MW039A	05/19/2003	3435.71	57.27	NM	NA	3378.44
MW039A	09/09/2003	3435.71	57.43	NM	NA	3378.28
MW039A	12/02/2003	3435.71	57.32	NM	NA	3378.39
MW039A	03/30/2004	3435.71	57.43	NM	NA	3378.28
MW039A	06/07/2004	3435.71	57.52	NM	NA	3378.19
MW039A	09/17/2004	3435.71	57.22	NM	NA	3378.49

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW039A	11/30/2004	3435.71	57.00	NM	NA	3378.71
MW039A	03/31/2005	3435.71	56.54	NM	NA	3379.17
MW039A	05/23/2005	3435.71	56.29	NM	NA	3379.42
MW039A	01/16/2006	3435.71	55.75	NM	NA	3379.96
MW039A	06/19/2006	3435.71	55.41	NM	NA	3380.30
MW039A	04/12/2007	3435.71	55.01	NM	NA	3380.70
MW039A	03/19/2008	3435.71	54.88	NM	NA	3380.83
MW039A	03/11/2009	3435.71	55.14	NM	NA	3380.57
MW039A	03/01/2010	3435.71	55.16	NM	NA	3380.55
MW039A	08/03/2010	3435.71	55.24	NM	NA	3380.47
MW039A	05/06/2011	3435.71	55.08	NM	NA	3380.63
MW039A	11/04/2011	3435.71	55.12	NM	NA	3380.59
MW039A	05/03/2012	3435.71	55.22	NM	NA	3380.49
MW039A	10/24/2012	3435.71	55.40	NM	NA	3380.31
MW039A	05/02/2013	3435.71	55.60	NM	NA	3380.11
MW039A	10/29/2013	3435.71	55.56	NM	NA	3380.15
MW039A	05/05/2014	3435.71	55.64	NM	NA	3380.07
MW039A	11/04/2014	3435.71	55.51	NM	NA	3380.20
MW039A	05/06/2015	3435.71	51.32	NM	NA	3384.39
MW040A	04/04/2002	3422.92	43.70	NM	NA	3379.22
MW040A	09/03/2002	3422.92	43.90	NM	NA	3379.02
MW040A	12/02/2002	3422.92	43.71	NM	NA	3379.21
MW040A	01/31/2003	3422.92	43.71	NM	NA	3379.21
MW040A	03/28/2003	3422.92	43.71	NM	NA	3379.21
MW040A	05/19/2003	3422.92	43.69	NM	NA	3379.23
MW040A	09/09/2003	3422.92	43.69	NM	NA	3379.23
MW040A	12/02/2003	3422.92	43.68	NM	NA	3379.24
MW040A	03/30/2004	3422.92	43.84	NM	NA	3379.08
MW040A	06/07/2004	3422.92	43.97	NM	NA	3378.95
MW040A	09/17/2004	3422.92	43.70	NM	NA	3379.22
MW040A	11/30/2004	3422.92	43.29	NM	NA	3379.63
MW040A	03/31/2005	3422.92	32.79	NM	NA	3390.13
MW040A	05/23/2005	3422.92	42.55	NM	NA	3380.37
MW040A	01/16/2006	3422.92	42.40	NM	NA	3380.52
MW040A	06/16/2006	3422.92	42.10	NM	NA	3380.82
MW040A	04/02/2007	3422.92	41.61	NM	NA	3381.31
MW040A	09/11/2007	3422.92	41.73	NM	NA	3381.19
MW040A	03/18/2008	3422.92	41.51	NM	NA	3381.41
MW040A	08/04/2008	3422.92	41.70	NM	NA	3381.22
MW040A	03/10/2009	3422.92	41.96	NM	NA	3380.96
MW040A	07/28/2009	3422.92	42.17	NM	NA	3380.75
MW040A	03/01/2010	3422.92	42.21	NM	NA	3380.71
MW040A	08/02/2010	3422.92	41.31	NM	NA	3381.61
MW040A	05/03/2011	3422.92	42.25	NM	NA	3380.67
MW040A	11/02/2011	3422.92	42.20	NM	NA	3380.72
MW040A	05/01/2012	3422.92	42.28	NM	NA	3380.64
MW040A	10/24/2012	3422.92	42.57	NM	NA	3380.35
MW040A	05/01/2013	3422.92	42.69	NM	NA	3380.23
MW040A	10/29/2013	3422.92	42.80	NM	NA	3380.12
MW040A	05/05/2014	3422.92	42.91	NM	NA	3380.01
MW040A	11/03/2014	3422.92	42.50	NM	NA	3380.42
MW040A	05/06/2015	3422.92	42.22	NM	NA	3380.70
MW040A	11/03/2015	3422.92	42.22	NM	NA	3380.70
MW040A	05/10/2016	3422.92	42.02	NM	NA	3380.90
MW040A	09/22/2016	3422.92	41.94	NM	NA	3380.98
MW040A	05/02/2017	3422.92	41.35	NM	NA	3381.57
MW040A	09/18/2017	3422.92	41.32	NM	NA	3381.60
MW040A	03/20/2018	3422.92	41.07	NM	NA	3381.85
MW040A	09/13/2018	3422.92	41.2	NM	NA	3381.72
MW040A	04/16/2019	3422.92	40.97	NM	NA	3381.95
MW040A	10/07/2019	3422.92	41.16	NM	NA	3381.76
MW041A	04/29/2002	3418.42	43.22	NM	NA	3375.20
MW041A	05/07/2002	3418.42	43.12	NM	NA	3375.30
MW041A	09/03/2002	3418.42	43.30	NM	NA	3375.12
MW041A	12/02/2002	3418.42	43.04	NM	NA	3375.38
MW041A	01/30/2003	3418.42	43.19	NM	NA	3375.23
MW041A	03/28/2003	3418.42	43.01	NM	NA	3375.41
MW041A	05/19/2003	3418.42	43.08	NM	NA	3375.34
MW041A	09/08/2003	3418.42	43.23	NM	NA	3375.19
MW041A	12/02/2003	3418.42	43.23	NM	NA	3375.19

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW041A	03/30/2004	3418.42	43.38	NM	NA	3375.04
MW041A	06/07/2004	3418.42	43.33	NM	NA	3375.09
MW041A	09/16/2004	3418.42	43.24	NM	NA	3375.18
MW041A	11/29/2004	3418.42	42.97	NM	NA	3375.45
MW041A	03/31/2005	3418.42	42.49	NM	NA	3375.93
MW041A	05/23/2005	3418.42	42.35	NM	NA	3376.07
MW041A	01/17/2006	3418.42	41.90	NM	NA	3376.52
MW041A	06/16/2006	3418.42	41.57	NM	NA	3376.85
MW041A	04/17/2007	3418.42	41.25	NM	NA	3377.17
MW041A	03/19/2008	3418.42	41.20	NM	NA	3377.22
MW041A	03/11/2009	3418.42	41.70	NM	NA	3376.72
MW041A	03/01/2010	3418.42	41.68	NM	NA	3376.74
MW041A	08/02/2010	3418.42	41.85	NM	NA	3376.57
MW041A	05/06/2011	3418.42	41.79	NM	NA	3376.63
MW041A	11/03/2011	3418.42	42.11	NM	NA	3376.31
MW041A	05/08/2012	3418.42	42.05	NM	NA	3376.37
MW041A	10/24/2012	3418.42	42.47	NM	NA	3375.95
MW041A	04/30/2013	3418.42	42.66	NM	NA	3375.76
MW041A	05/05/2014	3418.42	42.90	NM	NA	3375.52
MW041A	11/03/2014	3418.42	42.48	NM	NA	3375.94
MW041A	05/05/2015	3418.42	42.11	NM	NA	3376.31
MW041A	11/02/2015	3418.42	42.18	NM	NA	3376.24
MW041A	05/10/2016	3418.42	41.92	NM	NA	3376.50
MW041A	09/15/2016	3418.42	41.94	NM	NA	3376.48
MW041A	05/02/2017	3418.42	41.46	NM	NA	3376.96
MW041A	09/18/2017	3418.42	41.28	NM	NA	3377.14
MW041A	03/20/2018	3418.42	41.04	NM	NA	3377.38
MW041A	09/12/2018	3418.42	41.26	NM	NA	3377.16
MW041A	04/09/2019	3418.42	40.51	NM	NA	3377.91
MW041A	10/07/2019	3418.42	41.11	NM	NA	3377.31
MW042A	08/23/2001	3424.75	46.26	NM	NA	3378.49
MW042A	01/21/2002	3424.75	48.30	NM	NA	3376.45
MW042A	04/04/2002	3424.75	48.17	NM	NA	3376.58
MW042A	09/03/2002	3424.75	47.86	NM	NA	3376.89
MW042A	12/02/2002	3424.75	47.75	NM	NA	3377.00
MW042A	01/31/2003	3424.75	47.65	NM	NA	3377.10
MW042A	03/28/2003	3424.75	47.84	NM	NA	3376.91
MW042A	05/19/2003	3424.75	47.84	NM	NA	3376.91
MW042A	09/09/2003	3424.75	48.04	NM	NA	3376.71
MW042A	12/03/2003	3424.75	48.00	NM	NA	3376.75
MW042A	03/30/2004	3424.75	48.31	NM	NA	3376.44
MW042A	06/07/2004	3424.75	48.42	NM	NA	3376.33
MW042A	09/17/2004	3424.75	48.58	NM	NA	3376.17
MW042A	11/29/2004	3424.75	47.24	NM	NA	3377.51
MW042A	03/31/2005	3424.75	47.30	NM	NA	3377.45
MW042A	05/23/2005	3424.75	47.05	NM	NA	3377.70
MW042A	01/17/2006	3424.75	46.02	NM	NA	3378.73
MW042A	06/19/2006	3424.75	45.90	NM	NA	3378.85
MW042A	04/17/2007	3424.75	45.59	NM	NA	3379.16
MW042A	03/19/2008	3424.75	45.71	NM	NA	3379.04
MW042A	03/11/2009	3424.75	46.15	NM	NA	3378.60
MW042A	03/01/2010	3424.75	46.19	NM	NA	3378.56
MW042A	08/02/2010	3424.75	46.38	NM	NA	3378.37
MW042A	05/06/2011	3424.75	46.00	NM	NA	3378.75
MW042A	11/04/2011	3424.75	46.57	NM	NA	3378.18
MW042A	05/03/2012	3424.75	46.58	NM	NA	3378.17
MW042A	10/24/2012	3424.75	46.91	NM	NA	3377.84
MW042A	05/02/2013	3424.75	46.98	NM	NA	3377.77
MW042A	10/29/2013	3424.75	47.10	NM	NA	3377.65
MW042A	05/05/2014	3424.75	47.16	NM	NA	3377.59
MW042A	11/03/2014	3424.75	46.31	NM	NA	3378.44
MW042A	05/06/2015	3424.75	46.35	NM	NA	3378.40
MW042A	11/03/2015	3424.75	45.80	NM	NA	3378.95
MW042A	05/03/2017	3424.75	45.62	NM	NA	3379.13
MW043	05/07/2002	3423.57	47.61	NM	NA	3375.96
MW043	09/03/2002	3423.57	47.53	NM	NA	3376.04
MW043	12/02/2002	3423.57	47.42	NM	NA	3376.15
MW043	01/30/2003	3423.57	47.38	NM	NA	3376.19
MW043	03/28/2003	3423.57	47.44	NM	NA	3376.13
MW043	05/19/2003	3423.57	47.50	NM	NA	3376.07

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW043	09/08/2003	3423.57	47.64	NM	NA	3375.93
MW043	12/02/2003	3423.57	47.55	NM	NA	3376.02
MW043	03/30/2004	3423.57	47.84	NM	NA	3375.73
MW043	06/07/2004	3423.57	47.82	NM	NA	3375.75
MW043	09/14/2004	3423.57	47.44	NM	NA	3376.13
MW043	11/29/2004	3423.57	46.55	NM	NA	3377.02
MW043	03/31/2005	3423.57	46.49	NM	NA	3377.08
MW043	05/23/2005	3423.57	46.51	NM	NA	3377.06
MW043	01/17/2006	3423.57	44.92	NM	NA	3378.65
MW043	06/14/2006	3423.57	45.45	NM	NA	3378.12
MW043	04/09/2007	3423.57	45.35	NM	NA	3378.22
MW043	03/18/2008	3423.57	45.36	NM	NA	3378.21
MW043	03/10/2009	3423.57	45.85	NM	NA	3377.72
MW043	03/01/2010	3423.57	45.94	NM	NA	3377.63
MW043	07/30/2010	3423.57	46.01	NM	NA	3377.56
MW043	05/04/2011	3423.57	45.58	NM	NA	3377.99
MW043	11/01/2011	3423.57	46.20	NM	NA	3377.37
MW043	05/02/2012	3423.57	46.24	NM	NA	3377.33
MW043	10/24/2012	3423.57	46.58	NM	NA	3376.99
MW043	04/29/2013	3423.57	46.73	NM	NA	3376.84
MW043	10/29/2013	3423.57	47.06	NM	NA	3376.51
MW043	05/05/2014	3423.57	47.01	NM	NA	3376.56
MW043	11/03/2014	3423.57	46.60	NM	NA	3376.97
MW043	05/05/2015	3423.57	46.27	NM	NA	3377.30
MW043	11/02/2015	3423.57	46.33	NM	NA	3377.24
MW043	05/11/2016	3423.57	46.05	NM	NA	3377.52
MW043	09/15/2016	3423.57	46.07	NM	NA	3377.50
MW043	05/01/2017	3423.57	45.32	NM	NA	3378.25
MW043	09/14/2017	3423.57	45.42	NM	NA	3378.15
MW043	03/20/2018	3423.57	45.27	NM	NA	3378.30
MW043	09/11/2018	3423.57	45.47	NM	NA	3378.10
MW043	04/09/2019	3423.57	45.06	NM	NA	3378.51
MW043	10/07/2019	3423.57	45.34	NM	NA	3378.23
MW044	04/04/2002	3420.41	43.86	NM	NA	3376.55
MW044	09/03/2002	3420.41	43.52	NM	NA	3376.89
MW044	12/02/2002	3420.41	43.47	NM	NA	3376.94
MW044	01/30/2003	3420.41	43.68	NM	NA	3376.73
MW044	03/28/2003	3420.41	43.49	NM	NA	3376.92
MW044	05/19/2003	3420.41	43.58	NM	NA	3376.83
MW044	09/08/2003	3420.41	43.69	NM	NA	3376.72
MW044	12/02/2003	3420.41	43.65	NM	NA	3376.76
MW044	03/30/2004	3420.41	43.90	NM	NA	3376.51
MW044	06/07/2004	3420.41	43.88	NM	NA	3376.53
MW044	09/16/2004	3420.41	43.49	NM	NA	3376.92
MW044	11/29/2004	3420.41	43.06	NM	NA	3377.35
MW044	03/31/2005	3420.41	42.59	NM	NA	3377.82
MW044	05/23/2005	3420.41	42.55	NM	NA	3377.86
MW044	01/17/2006	3420.41	41.72	NM	NA	3378.69
MW044	06/19/2006	3420.41	41.59	NM	NA	3378.82
MW044	04/06/2007	3420.41	41.45	NM	NA	3378.96
MW044	03/19/2008	3420.41	41.35	NM	NA	3379.06
MW044	03/11/2009	3420.41	41.89	NM	NA	3378.52
MW044	03/01/2010	3420.41	41.54	NM	NA	3378.87
MW044	08/02/2010	3420.41	41.96	NM	NA	3378.45
MW044	05/04/2011	3420.41	41.79	NM	NA	3378.62
MW044	11/01/2011	3420.41	42.05	NM	NA	3378.36
MW044	10/24/2012	3420.41	42.56	NM	NA	3377.85
MW044	04/30/2013	3420.41	42.70	NM	NA	3377.71
MW044	10/28/2013	3420.41	43.05	NM	NA	3377.36
MW044	05/05/2014	3420.41	43.01	NM	NA	3377.40
MW044	11/03/2014	3420.41	42.55	NM	NA	3377.86
MW044	05/05/2015	3420.41	42.29	NM	NA	3378.12
MW044	11/02/2015	3420.41	42.31	NM	NA	3378.10
MW044	05/11/2016	3420.41	42.04	NM	NA	3378.37
MW044	09/15/2016	3420.41	42.01	NM	NA	3378.40
MW044	05/01/2017	3420.41	41.30	NM	NA	3379.11
MW044	03/20/2018	3420.41	41.17	NM	NA	3379.24
MW045	04/04/2002	3425.53	48.57	NM	NA	3376.96
MW045	09/03/2002	3425.53	48.15	NM	NA	3377.38
MW045	12/02/2002	3425.53	47.94	NM	NA	3377.59

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW045	01/31/2003	3425.53	48.08	NM	NA	3377.45
MW045	03/28/2003	3425.53	48.31	NM	NA	3377.22
MW045	05/19/2003	3425.53	48.11	NM	NA	3377.42
MW045	09/09/2003	3425.53	48.34	NM	NA	3377.19
MW045	12/03/2003	3425.53	48.37	NM	NA	3377.16
MW045	03/30/2004	3425.53	48.44	NM	NA	3377.09
MW045	06/07/2004	3425.53	48.61	NM	NA	3376.92
MW045	09/17/2004	3425.53	48.10	NM	NA	3377.43
MW045	11/30/2004	3425.53	47.60	NM	NA	3377.93
MW045	03/31/2005	3425.53	47.05	NM	NA	3378.48
MW045	05/23/2005	3425.53	46.98	NM	NA	3378.55
MW045	01/17/2006	3425.53	46.36	NM	NA	3379.17
MW045	06/19/2006	3425.53	45.87	NM	NA	3379.66
MW045	04/02/2007	3425.53	45.66	NM	NA	3379.87
MW045	04/17/2007	3425.53	45.73	NM	NA	3379.80
MW045	03/18/2008	3425.53	45.74	NM	NA	3379.79
MW045	03/10/2009	3425.53	46.16	NM	NA	3379.37
MW045	03/01/2010	3425.53	46.40	NM	NA	3379.13
MW045	08/02/2010	3425.53	46.36	NM	NA	3379.17
MW045	05/06/2011	3420.41	46.05	NM	NA	3374.36
MW045	11/02/2011	3425.53	45.92	NM	NA	3379.61
MW045	05/03/2012	3425.53	46.53	NM	NA	3379.00
MW045	10/24/2012	3425.53	46.85	NM	NA	3378.68
MW045	05/02/2013	3425.53	46.93	NM	NA	3378.60
MW045	10/29/2013	3425.53	47.07	NM	NA	3378.46
MW045	05/05/2014	3425.53	47.09	NM	NA	3378.44
MW045	11/04/2014	3425.53	46.84	NM	NA	3378.69
MW045	05/06/2015	3425.53	46.41	NM	NA	3379.12
MW045	09/16/2015	3425.53	46.28	NM	NA	3379.25
MW045	11/03/2015	3425.53	46.55	NM	NA	3378.98
MW045	05/12/2016	3425.53	46.26	NM	NA	3379.27
MW045	05/03/2017	3425.53	45.75	NM	NA	3379.78
MW045	09/18/2017	3425.53	45.71	NM	NA	3379.82
MW045	03/20/2018	3425.53	45.51	NM	NA	3380.02
MW045	09/11/2018	3425.53	45.7	NM	NA	3379.83
MW045	04/10/2019	3425.53	45.35	NM	NA	3380.18
MW045	10/07/2019	3425.53	45.59	NM	NA	3379.94
MW046	04/04/2002	3426.81	49.93	NM	NA	3376.88
MW046	09/03/2002	3426.81	49.37	NM	NA	3377.44
MW046	12/02/2002	3426.81	49.17	NM	NA	3377.64
MW046	01/31/2003	3426.81	49.33	NM	NA	3377.48
MW046	03/28/2003	3426.81	49.66	NM	NA	3377.15
MW046	05/19/2003	3426.81	49.35	NM	NA	3377.46
MW046	09/09/2003	3426.81	49.67	NM	NA	3377.14
MW046	12/03/2003	3426.81	49.75	NM	NA	3377.06
MW046	03/30/2004	3426.81	49.82	NM	NA	3376.99
MW046	06/07/2004	3426.81	50.05	NM	NA	3376.76
MW046	09/17/2004	3426.81	49.33	NM	NA	3377.48
MW046	11/30/2004	3426.81	48.99	NM	NA	3377.82
MW046	03/31/2005	3426.81	48.36	NM	NA	3378.45
MW046	05/23/2005	3426.81	48.18	NM	NA	3378.63
MW046	01/17/2006	3426.81	47.34	NM	NA	3379.47
MW046	06/19/2006	3426.81	46.87	NM	NA	3379.94
MW046	04/19/2007	3426.81	46.75	NM	NA	3380.06
MW046	03/18/2008	3426.81	46.84	NM	NA	3379.97
MW046	03/11/2009	3426.81	47.33	NM	NA	3379.48
MW046	03/01/2010	3426.81	47.44	NM	NA	3379.37
MW046	08/02/2010	3426.81	46.45	NM	NA	3380.36
MW046	05/06/2011	3426.81	47.20	NM	NA	3379.61
MW046	11/02/2011	3426.81	46.98	NM	NA	3379.83
MW046	05/03/2012	3426.81	47.53	NM	NA	3379.28
MW046	10/24/2012	3426.81	47.79	NM	NA	3379.02
MW046	05/02/2013	3426.81	47.98	NM	NA	3378.83
MW046	10/29/2013	3426.81	48.06	NM	NA	3378.75
MW046	05/05/2014	3426.81	48.07	NM	NA	3378.74
MW046	11/04/2014	3426.81	47.85	NM	NA	3378.96
MW046	05/06/2015	3426.81	47.57	NM	NA	3379.24
MW046	09/16/2015	3426.81	47.35	NM	NA	3379.46
MW046	11/03/2015	3426.81	47.51	NM	NA	3379.30
MW046	05/12/2016	3426.81	47.42	NM	NA	3379.39

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW046	05/03/2017	3426.81	46.88	NM	NA	3379.93
MW046A	01/07/2003	3426.45	50.09	NM	NA	3376.36
MW046A	01/31/2003	3426.45	48.81	NM	NA	3377.64
MW046A	03/28/2003	3426.45	49.06	NM	NA	3377.39
MW046A	05/19/2003	3426.45	48.88	NM	NA	3377.57
MW046A	09/09/2003	3426.45	50.48	NM	NA	3375.97
MW046A	12/03/2003	3426.45	50.54	NM	NA	3375.91
MW046A	03/30/2004	3426.45	50.33	NM	NA	3376.12
MW046A	06/07/2004	3426.45	50.20	NM	NA	3376.25
MW046A	09/17/2004	3426.45	48.83	NM	NA	3377.62
MW046A	11/30/2004	3426.45	48.66	NM	NA	3377.79
MW046A	03/31/2005	3426.45	47.92	NM	NA	3378.53
MW046A	05/23/2005	3426.45	47.75	NM	NA	3378.70
MW046A	01/17/2006	3426.45	46.55	NM	NA	3379.90
MW046A	06/19/2006	3426.45	46.12	NM	NA	3380.33
MW046A	04/17/2007	3426.45	46.35	NM	NA	3380.10
MW046A	03/19/2008	3426.45	46.39	NM	NA	3380.06
MW046A	03/11/2009	3426.45	46.78	NM	NA	3379.67
MW046A	03/01/2010	3426.45	46.95	NM	NA	3379.50
MW046A	08/02/2010	3426.45	46.96	NM	NA	3379.49
MW046A	05/06/2011	3426.45	46.70	NM	NA	3379.75
MW046A	11/04/2011	3426.45	47.05	NM	NA	3379.40
MW046A	05/03/2012	3426.45	47.10	NM	NA	3379.35
MW046A	10/24/2012	3426.45	47.32	NM	NA	3379.13
MW046A	05/02/2013	3426.45	47.50	NM	NA	3378.95
MW046A	10/29/2013	3426.45	47.61	NM	NA	3378.84
MW046A	05/05/2014	3426.45	47.65	NM	NA	3378.80
MW046A	11/04/2014	3426.45	47.40	NM	NA	3379.05
MW046A	05/06/2015	3426.45	47.00	NM	NA	3379.45
MW046A	09/16/2015	3426.45	46.89	NM	NA	3379.56
MW046A	11/03/2015	3426.45	47.09	NM	NA	3379.36
MW046A	05/12/2016	3426.45	46.92	NM	NA	3379.53
MW046A	05/03/2017	3426.45	46.48	NM	NA	3379.97
MW046A	09/18/2017	3426.45	46.33	NM	NA	3380.12
MW046A	03/20/2018	3426.45	46.2	NM	NA	3380.25
MW046A	09/11/2018	3426.45	46.8	NM	NA	3379.65
MW046A	04/10/2019	3426.45	46.00	NM	NA	3380.45
MW046A	10/07/2019	3426.45	46.25	NM	NA	3380.20
MW047	04/04/2002	3427.65	49.54	NM	NA	3378.11
MW047	09/03/2002	3427.65	49.40	NM	NA	3378.25
MW047	12/02/2002	3427.65	49.16	NM	NA	3378.49
MW047	01/31/2003	3427.65	49.22	NM	NA	3378.43
MW047	03/28/2003	3427.65	49.29	NM	NA	3378.36
MW047	05/19/2003	3427.65	49.21	NM	NA	3378.44
MW047	09/09/2003	3427.65	49.36	NM	NA	3378.29
MW047	12/03/2003	3427.65	49.38	NM	NA	3378.27
MW047	03/30/2004	3427.65	49.50	NM	NA	3378.15
MW047	06/07/2004	3427.65	49.43	NM	NA	3378.22
MW047	09/17/2004	3427.65	49.20	NM	NA	3378.45
MW047	11/30/2004	3427.65	48.66	NM	NA	3378.99
MW047	03/31/2005	3427.65	47.98	NM	NA	3379.67
MW047	05/23/2005	3427.65	47.90	NM	NA	3379.75
MW047	01/17/2006	3427.65	47.38	NM	NA	3380.27
MW047	06/19/2006	3427.65	47.12	NM	NA	3380.53
MW047	04/16/2007	3427.65	46.73	NM	NA	3380.92
MW047	03/19/2008	3427.65	46.84	NM	NA	3380.81
MW047	03/01/2010	3427.65	47.50	NM	NA	3380.15
MW047	08/03/2010	3427.65	47.58	NM	NA	3380.07
MW047	05/06/2011	3427.65	47.33	NM	NA	3380.32
MW047	11/01/2011	3427.65	47.51	NM	NA	3380.14
MW047	05/22/2012	3427.65	47.65	NM	NA	3380.00
MW047	10/23/2012	3427.65	47.90	NM	NA	3379.75
MW047	05/02/2013	3427.65	48.10	NM	NA	3379.55
MW047	10/29/2013	3427.65	48.22	NM	NA	3379.43
MW047	11/04/2013	3427.65	47.80	NM	NA	3379.85
MW047	05/05/2014	3427.65	48.26	NM	NA	3379.39
MW047	05/06/2015	3427.65	47.55	NM	NA	3380.10
MW047	09/16/2015	3427.65	47.30	NM	NA	3380.35
MW047	11/03/2015	3427.65	47.58	NM	NA	3380.07
MW047	05/12/2016	3427.65	47.38	NM	NA	3380.27

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW047	05/03/2017	3427.65	46.75	NM	NA	3380.90
MW047	09/18/2017	3427.65	46.68	NM	NA	3380.97
MW047	03/20/2018	3427.65	46.51	NM	NA	3381.14
MW047	09/10/2018	3427.65	46.7	NM	NA	3380.95
MW047	04/10/2019	3427.65	46.30	NM	NA	3381.35
MW047	10/07/2019	3427.65	46.60	NM	NA	3381.05
MW048SA	08/01/2002	3421.10	46.45	NM	NA	3374.65
MW048SA	09/03/2002	3421.10	46.40	NM	NA	3374.70
MW048SA	12/02/2002	3421.10	46.26	NM	NA	3374.84
MW048SA	01/30/2003	3421.10	46.18	NM	NA	3374.92
MW048SA	03/28/2003	3421.10	46.15	NM	NA	3374.95
MW048SA	05/19/2003	3421.10	46.19	NM	NA	3374.91
MW048SA	09/08/2003	3421.10	46.44	NM	NA	3374.66
MW048SA	12/02/2003	3421.10	46.45	NM	NA	3374.65
MW048SA	03/30/2004	3421.10	46.62	NM	NA	3374.48
MW048SA	06/07/2004	3421.10	46.48	NM	NA	3374.62
MW048SA	09/16/2004	3421.10	46.43	NM	NA	3374.67
MW048SA	11/29/2004	3421.10	46.17	NM	NA	3374.93
MW048SA	03/31/2005	3421.10	45.67	NM	NA	3375.43
MW048SA	05/23/2005	3421.10	45.52	NM	NA	3375.58
MW048SA	01/17/2006	3421.10	45.11	NM	NA	3375.99
MW048SA	06/16/2006	3421.10	44.96	NM	NA	3376.14
MW048SA	04/10/2007	3421.10	44.62	NM	NA	3376.48
MW048SA	09/19/2007	3421.10	44.49	NM	NA	3376.61
MW048SA	03/19/2008	3421.10	44.60	NM	NA	3376.50
MW048SA	08/04/2008	3421.10	44.94	NM	NA	3376.16
MW048SA	03/11/2009	3421.10	45.02	NM	NA	3376.08
MW048SA	07/29/2009	3421.10	45.26	NM	NA	3375.84
MW048SA	03/01/2010	3421.10	45.23	NM	NA	3375.87
MW048SA	08/03/2010	3421.10	43.65	NM	NA	3377.45
MW048SA	05/04/2011	3421.10	45.30	NM	NA	3375.80
MW048SA	11/03/2011	3421.10	45.55	NM	NA	3375.55
MW048SA	05/02/2012	3421.10	45.63	NM	NA	3375.47
MW048SA	10/23/2012	3421.10	45.87	NM	NA	3375.23
MW048SA	04/30/2013	3421.10	45.99	NM	NA	3375.11
MW048SA	10/28/2013	3421.10	46.26	NM	NA	3374.84
MW048SA	05/05/2014	3421.10	46.17	NM	NA	3374.93
MW048SA	11/03/2014	3421.10	45.94	NM	NA	3375.16
MW048SA	05/05/2015	3421.10	45.48	NM	NA	3375.62
MW048SA	09/03/2015	3421.10	45.51	NM	NA	3375.59
MW048SA	11/03/2015	3421.10	45.60	NM	NA	3375.50
MW048SA	05/10/2016	3421.10	45.28	NM	NA	3375.82
MW048SA	09/22/2016	3421.10	45.31	NM	NA	3375.79
MW048SA	05/01/2017	3421.10	44.56	NM	NA	3376.54
MW048SA	09/14/2017	3421.10	44.47	NM	NA	3376.63
MW048SA	03/20/2018	3421.10	44.2	NM	NA	3376.90
MW048SA	09/12/2018	3421.10	44.4	NM	NA	3376.70
MW048SA	04/09/2019	3421.10	44.09	NM	NA	3377.01
MW048SA	10/07/2019	3421.10	44.43	NM	NA	3376.67
MW049SA	07/30/2002	3422.46	49.31	NM	NA	3373.15
MW049SA	09/03/2002	3422.46	49.29	NM	NA	3373.17
MW049SA	12/02/2002	3422.46	49.18	NM	NA	3373.28
MW049SA	01/30/2003	3422.46	49.13	NM	NA	3373.33
MW049SA	03/28/2003	3422.46	49.09	NM	NA	3373.37
MW049SA	05/19/2003	3422.46	49.08	NM	NA	3373.38
MW049SA	09/08/2003	3422.46	49.32	NM	NA	3373.14
MW049SA	12/02/2003	3422.46	49.32	NM	NA	3373.14
MW049SA	03/30/2004	3422.46	49.42	NM	NA	3373.04
MW049SA	06/07/2004	3422.46	48.57	NM	NA	3373.89
MW049SA	09/16/2004	3422.46	49.36	NM	NA	3373.10
MW049SA	11/29/2004	3422.46	49.16	NM	NA	3373.30
MW049SA	03/31/2005	3422.46	48.65	NM	NA	3373.81
MW049SA	05/23/2005	3422.46	48.59	NM	NA	3373.87
MW049SA	01/17/2006	3422.46	48.19	NM	NA	3374.27
MW049SA	06/16/2006	3422.46	47.97	NM	NA	3374.49
MW049SA	04/10/2007	3422.46	47.62	NM	NA	3374.84
MW049SA	03/19/2008	3422.46	47.53	NM	NA	3374.93
MW049SA	03/11/2009	3422.46	47.95	NM	NA	3374.51
MW049SA	03/01/2010	3422.46	48.12	NM	NA	3374.34
MW049SA	08/03/2010	3422.46	48.21	NM	NA	3374.25

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW049SA	05/04/2011	3422.46	48.16	NM	NA	3374.30
MW049SA	11/03/2011	3422.46	48.48	NM	NA	3373.98
MW049SA	05/02/2012	3422.46	48.48	NM	NA	3373.98
MW049SA	10/23/2012	3422.46	48.78	NM	NA	3373.68
MW049SA	04/30/2013	3422.46	48.90	NM	NA	3373.56
MW049SA	10/28/2013	3422.46	49.10	NM	NA	3373.36
MW049SA	05/05/2014	3422.46	49.00	NM	NA	3373.46
MW049SA	11/03/2014	3422.46	48.96	NM	NA	3373.50
MW049SA	05/05/2015	3422.46	48.35	NM	NA	3374.11
MW049SA	09/03/2015	3422.46	48.50	NM	NA	3373.96
MW049SA	11/03/2015	3422.46	48.41	NM	NA	3374.05
MW049SA	05/10/2016	3422.46	48.11	NM	NA	3374.35
MW049SA	09/15/2016	3422.46	48.30	NM	NA	3374.16
MW049SA	05/01/2017	3422.46	47.62	NM	NA	3374.84
MW049SA	09/14/2017	3422.46	47.57	NM	NA	3374.89
MW049SA	03/20/2018	3422.46	47.35	NM	NA	3375.11
MW049SA	09/12/2018	3422.46	44.78	NM	NA	3377.68
MW049SA	04/09/2019	3422.46	47.15	NM	NA	3375.31
MW049SA	10/07/2019	3422.46	42.44	NM	NA	3380.02
MW050SA	07/30/2002	3419.31	46.30	NM	NA	3373.01
MW050SA	09/03/2002	3419.31	46.19	NM	NA	3373.12
MW050SA	12/02/2002	3419.31	45.93	NM	NA	3373.38
MW050SA	01/30/2003	3419.31	45.92	NM	NA	3373.39
MW050SA	03/28/2003	3419.31	45.92	NM	NA	3373.39
MW050SA	05/19/2003	3419.31	46.01	NM	NA	3373.30
MW050SA	09/08/2003	3419.31	46.13	NM	NA	3373.18
MW050SA	12/02/2003	3419.31	46.05	NM	NA	3373.26
MW050SA	03/30/2004	3419.31	46.15	NM	NA	3373.16
MW050SA	06/07/2004	3419.31	46.18	NM	NA	3373.13
MW050SA	09/14/2004	3419.31	46.18	NM	NA	3373.13
MW050SA	11/29/2004	3419.31	45.80	NM	NA	3373.51
MW050SA	03/31/2005	3419.31	45.34	NM	NA	3373.97
MW050SA	05/23/2005	3419.31	45.26	NM	NA	3374.05
MW050SA	01/17/2006	3419.31	44.95	NM	NA	3374.36
MW050SA	06/14/2006	3419.31	44.71	NM	NA	3374.60
MW050SA	04/09/2007	3419.31	44.28	NM	NA	3375.03
MW050SA	03/19/2008	3419.31	44.25	NM	NA	3375.06
MW050SA	03/11/2009	3419.31	44.78	NM	NA	3374.53
MW050SA	03/01/2010	3419.31	44.82	NM	NA	3374.49
MW050SA	07/30/2010	3419.31	45.02	NM	NA	3374.29
MW050SA	05/04/2011	3419.31	44.84	NM	NA	3374.47
MW050SA	11/04/2011	3419.31	45.24	NM	NA	3374.07
MW050SA	05/02/2012	3419.31	45.48	NM	NA	3373.83
MW050SA	10/24/2012	3419.31	45.70	NM	NA	3373.61
MW050SA	04/29/2013	3419.31	45.84	NM	NA	3373.47
MW050SA	10/28/2013	3419.31	45.95	NM	NA	3373.36
MW050SA	05/05/2014	3419.31	46.10	NM	NA	3373.21
MW050SA	11/03/2014	3419.31	45.70	NM	NA	3373.61
MW050SA	05/05/2015	3419.31	45.23	NM	NA	3374.08
MW050SA	09/03/2015	3419.31	45.37	NM	NA	3373.94
MW050SA	11/03/2015	3419.31	45.30	NM	NA	3374.01
MW050SA	05/11/2016	3419.31	44.29	NM	NA	3375.02
MW050SA	09/15/2016	3419.31	45.12	NM	NA	3374.19
MW050SA	05/01/2017	3419.31	44.64	NM	NA	3374.67
MW050SA	09/14/2017	3419.31	44.5	NM	NA	3374.81
MW050SA	03/20/2018	3419.31	44.33	NM	NA	3374.98
MW050SA	09/12/2018	3419.31	44.6	NM	NA	3374.71
MW050SA	04/09/2019	3419.31	44.00	NM	NA	3375.31
MW050SA	10/07/2019	3419.31	44.22	NM	NA	3375.09
MW051SA	10/10/2002	3415.42	44.50	NM	NA	3370.92
MW051SA	12/02/2002	3415.42	44.43	NM	NA	3370.99
MW051SA	01/30/2003	3415.42	44.38	NM	NA	3371.04
MW051SA	03/28/2003	3415.42	44.39	NM	NA	3371.03
MW051SA	05/19/2003	3415.42	44.40	NM	NA	3371.02
MW051SA	09/08/2003	3415.42	44.55	NM	NA	3370.87
MW051SA	12/02/2003	3415.42	44.53	NM	NA	3370.89
MW051SA	03/30/2004	3415.42	44.59	NM	NA	3370.83
MW051SA	06/07/2004	3415.42	44.53	NM	NA	3370.89
MW051SA	09/14/2004	3415.42	44.58	NM	NA	3370.84
MW051SA	03/31/2005	3415.42	44.04	NM	NA	3371.38

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW051SA	05/23/2005	3415.42	43.95	NM	NA	3371.47
MW051SA	01/17/2006	3415.42	43.70	NM	NA	3371.72
MW051SA	06/15/2006	3415.42	43.47	NM	NA	3371.95
MW051SA	04/17/2007	3415.42	43.09	NM	NA	3372.33
MW051SA	03/19/2008	3415.42	43.04	NM	NA	3372.38
MW051SA	03/11/2009	3415.42	43.48	NM	NA	3371.94
MW051SA	03/01/2010	3415.42	43.53	NM	NA	3371.89
MW051SA	08/03/2010	3415.42	43.65	NM	NA	3371.77
MW051SA	11/03/2011	3415.42	43.72	NM	NA	3371.70
MW051SA	05/02/2012	3415.42	46.19	NM	NA	3369.23
MW051SA	10/23/2012	3415.42	44.22	NM	NA	3371.20
MW051SA	04/30/2013	3415.42	44.31	NM	NA	3371.11
MW051SA	10/28/2013	3415.42	44.45	NM	NA	3370.97
MW051SA	05/05/2014	3415.42	44.46	NM	NA	3370.96
MW051SA	11/03/2014	3415.42	44.24	NM	NA	3371.18
MW051SA	05/05/2015	3415.42	43.81	NM	NA	3371.61
MW051SA	09/03/2015	3415.42	43.88	NM	NA	3371.54
MW051SA	11/03/2015	3415.42	43.90	NM	NA	3371.52
MW051SA	05/11/2016	3415.42	43.57	NM	NA	3371.85
MW051SA	09/15/2016	3415.42	43.66	NM	NA	3371.76
MW051SA	05/01/2017	3415.42	43.12	NM	NA	3372.30
MW051SA	09/14/2017	3415.42	43.16	NM	NA	3372.26
MW051SA	03/20/2018	3415.42	42.98	NM	NA	3372.44
MW051SA	09/12/2018	3415.42	43.27	NM	NA	3372.15
MW051SA	04/09/2019	3415.42	42.58	NM	NA	3372.84
MW051SA	10/07/2019	3415.42	43.00	NM	NA	3372.42
MW052SA	10/10/2002	3415.23	45.45	NM	NA	3369.78
MW052SA	12/02/2002	3415.23	45.39	NM	NA	3369.84
MW052SA	01/30/2003	3415.23	45.35	NM	NA	3369.88
MW052SA	03/28/2003	3415.23	45.36	NM	NA	3369.87
MW052SA	05/19/2003	3415.23	45.28	NM	NA	3369.95
MW052SA	09/08/2003	3415.23	45.51	NM	NA	3369.72
MW052SA	12/02/2003	3415.23	45.52	NM	NA	3369.71
MW052SA	03/30/2004	3415.23	45.58	NM	NA	3369.65
MW052SA	06/07/2004	3415.23	45.85	NM	NA	3369.38
MW052SA	09/14/2004	3415.23	45.58	NM	NA	3369.65
MW052SA	11/29/2004	3415.23	45.43	NM	NA	3369.80
MW052SA	03/31/2005	3415.23	45.05	NM	NA	3370.18
MW052SA	05/23/2005	3415.23	45.02	NM	NA	3370.21
MW052SA	01/17/2006	3415.23	44.72	NM	NA	3370.51
MW052SA	06/16/2006	3415.23	44.59	NM	NA	3370.64
MW052SA	04/10/2007	3415.23	44.34	NM	NA	3370.89
MW052SA	03/19/2008	3415.23	44.24	NM	NA	3370.99
MW052SA	03/11/2009	3415.23	44.54	NM	NA	3370.69
MW052SA	03/01/2010	3415.23	44.72	NM	NA	3370.51
MW052SA	08/03/2010	3415.23	44.78	NM	NA	3370.45
MW052SA	05/03/2011	3415.23	44.76	NM	NA	3370.47
MW052SA	11/03/2011	3415.23	45.03	NM	NA	3370.20
MW052SA	05/02/2012	3415.23	44.95	NM	NA	3370.28
MW052SA	10/23/2012	3415.23	45.21	NM	NA	3370.02
MW052SA	04/29/2013	3415.23	45.22	NM	NA	3370.01
MW052SA	10/28/2013	3415.23	45.54	NM	NA	3369.69
MW052SA	05/05/2014	3415.23	45.30	NM	NA	3369.93
MW052SA	11/03/2014	3415.23	45.36	NM	NA	3369.87
MW052SA	05/05/2015	3415.23	44.88	NM	NA	3370.35
MW052SA	09/03/2015	3415.23	44.99	NM	NA	3370.24
MW052SA	11/03/2015	3415.23	44.93	NM	NA	3370.30
MW052SA	05/10/2016	3415.23	44.65	NM	NA	3370.58
MW052SA	09/15/2016	3415.23	42.80	NM	NA	3372.43
MW052SA	05/01/2017	3415.23	44.23	NM	NA	3371.00
MW052SA	09/14/2017	3415.23	44.25	NM	NA	3370.98
MW052SA	03/20/2018	3415.23	44.06	NM	NA	3371.17
MW052SA	09/12/2018	3415.23	44.33	NM	NA	3370.90
MW052SA	04/09/2019	3415.23	43.91	NM	NA	3371.32
MW052SA	10/07/2019	3415.23	44.21	NM	NA	3371.02
MW053SA	09/18/2002	3413.86	42.93	NM	NA	3370.93
MW053SA	12/02/2002	3413.86	42.80	NM	NA	3371.06
MW053SA	01/30/2003	3413.86	42.68	NM	NA	3371.18
MW053SA	03/28/2003	3413.86	42.68	NM	NA	3371.18
MW053SA	05/19/2003	3413.86	42.65	NM	NA	3371.21

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW053SA	09/08/2003	3413.86	43.09	NM	NA	3370.77
MW053SA	12/02/2003	3413.86	43.12	NM	NA	3370.74
MW053SA	03/30/2004	3413.86	43.15	NM	NA	3370.71
MW053SA	06/07/2004	3413.86	43.04	NM	NA	3370.82
MW053SA	09/16/2004	3413.86	43.09	NM	NA	3370.77
MW053SA	11/29/2004	3413.86	42.74	NM	NA	3371.12
MW053SA	03/31/2005	3413.86	42.13	NM	NA	3371.73
MW053SA	05/23/2005	3413.86	41.97	NM	NA	3371.89
MW053SA	01/17/2006	3413.86	41.61	NM	NA	3372.25
MW053SA	06/16/2006	3413.86	41.67	NM	NA	3372.19
MW053SA	04/05/2007	3413.86	41.32	NM	NA	3372.54
MW053SA	09/19/2007	3413.86	41.20	NM	NA	3372.66
MW053SA	03/18/2008	3413.86	41.30	NM	NA	3372.56
MW053SA	08/04/2008	3413.86	41.76	NM	NA	3372.10
MW053SA	03/10/2009	3413.86	41.60	NM	NA	3372.26
MW053SA	07/28/2009	3413.86	41.97	NM	NA	3371.89
MW053SA	03/01/2010	3413.86	41.92	NM	NA	3371.94
MW053SA	07/30/2010	3413.86	41.98	NM	NA	3371.88
MW053SA	05/03/2011	3413.86	42.05	NM	NA	3371.81
MW053SA	11/03/2011	3413.86	42.39	NM	NA	3371.47
MW053SA	05/02/2012	3413.86	42.39	NM	NA	3371.47
MW053SA	10/23/2012	3413.86	42.65	NM	NA	3371.21
MW053SA	04/30/2013	3413.86	42.60	NM	NA	3371.26
MW053SA	10/29/2013	3413.86	43.00	NM	NA	3370.86
MW053SA	05/05/2014	3413.86	42.68	NM	NA	3371.18
MW053SA	11/03/2014	3413.86	42.67	NM	NA	3371.19
MW053SA	05/05/2015	3413.86	42.03	NM	NA	3371.83
MW053SA	09/03/2015	3413.86	42.26	NM	NA	3371.60
MW053SA	11/03/2015	3413.86	42.20	NM	NA	3371.66
MW053SA	04/10/2019	3413.86	40.68	NM	NA	3373.18
MW054SA	01/30/2003	3411.38	45.21	NM	NA	3366.17
MW054SA	03/28/2003	3411.38	45.09	NM	NA	3366.29
MW054SA	05/19/2003	3411.38	45.09	NM	NA	3366.29
MW054SA	09/08/2003	3411.38	45.43	NM	NA	3365.95
MW054SA	12/02/2003	3411.38	45.41	NM	NA	3365.97
MW054SA	03/30/2004	3411.38	45.46	NM	NA	3365.92
MW054SA	06/07/2004	3411.38	45.37	NM	NA	3366.01
MW054SA	09/14/2004	3411.38	42.48	NM	NA	3368.90
MW054SA	11/29/2004	3411.38	45.26	NM	NA	3366.12
MW054SA	03/31/2005	3411.38	44.90	NM	NA	3366.48
MW054SA	05/23/2005	3411.38	44.81	NM	NA	3366.57
MW054SA	01/17/2006	3411.38	44.68	NM	NA	3366.70
MW054SA	06/16/2006	3411.38	44.73	NM	NA	3366.65
MW054SA	04/10/2007	3411.38	44.57	NM	NA	3366.81
MW054SA	09/19/2007	3411.38	44.63	NM	NA	3366.75
MW054SA	03/19/2008	3411.38	44.59	NM	NA	3366.79
MW054SA	08/04/2008	3411.38	44.84	NM	NA	3366.54
MW054SA	03/11/2009	3411.38	44.74	NM	NA	3366.64
MW054SA	07/29/2009	3411.38	44.93	NM	NA	3366.45
MW054SA	03/01/2010	3411.38	44.87	NM	NA	3366.51
MW054SA	08/03/2010	3411.38	44.89	NM	NA	3366.49
MW054SA	05/03/2011	3411.38	44.92	NM	NA	3366.46
MW054SA	11/03/2011	3411.38	45.10	NM	NA	3366.28
MW054SA	05/02/2012	3411.38	45.01	NM	NA	3366.37
MW054SA	10/23/2012	3411.38	45.14	NM	NA	3366.24
MW054SA	04/29/2013	3411.38	45.10	NM	NA	3366.28
MW054SA	10/28/2013	3411.38	45.32	NM	NA	3366.06
MW054SA	05/05/2014	3411.38	45.11	NM	NA	3366.27
MW054SA	11/03/2014	3411.38	45.23	NM	NA	3366.15
MW054SA	05/05/2015	3411.38	44.87	NM	NA	3366.51
MW054SA	11/03/2015	3411.38	44.95	NM	NA	3366.43
MW054SA	05/10/2016	3411.38	44.71	NM	NA	3366.67
MW054SA	09/22/2016	3411.38	44.87	NM	NA	3366.51
MW054SA	05/01/2017	3411.38	44.49	NM	NA	3366.89
MW054SA	09/14/2017	3411.38	44.59	NM	NA	3366.79
MW054SA	03/20/2018	3411.38	44.38	NM	NA	3367.00
MW054SA	09/12/2018	3411.38	44.65	NM	NA	3366.73
MW054SA	04/09/2019	3411.38	44.03	NM	NA	3367.35
MW054SA	10/07/2019	3411.38	44.55	NM	NA	3366.83
MW055SA	01/06/2003	3407.43	41.20	NM	NA	3366.23

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW055SA	01/30/2003	3407.43	41.00	NM	NA	3366.43
MW055SA	03/27/2003	3407.43	41.15	NM	NA	3366.28
MW055SA	05/19/2003	3407.43	41.00	NM	NA	3366.43
MW055SA	09/08/2003	3407.43	41.13	NM	NA	3366.30
MW055SA	12/02/2003	3407.43	41.09	NM	NA	3366.34
MW055SA	03/30/2004	3407.43	41.12	NM	NA	3366.31
MW055SA	06/07/2004	3407.43	41.02	NM	NA	3366.41
MW055SA	09/14/2004	3407.43	41.18	NM	NA	3366.25
MW055SA	11/29/2004	3407.43	41.08	NM	NA	3366.35
MW055SA	03/31/2005	3407.43	40.90	NM	NA	3366.53
MW055SA	05/23/2005	3407.43	40.82	NM	NA	3366.61
MW055SA	01/17/2006	3407.43	40.76	NM	NA	3366.67
MW055SA	06/15/2006	3407.43	40.68	NM	NA	3366.75
MW055SA	04/10/2007	3407.43	40.63	NM	NA	3366.80
MW055SA	09/19/2007	3407.43	40.56	NM	NA	3366.87
MW055SA	03/19/2008	3407.43	40.68	NM	NA	3366.75
MW055SA	08/04/2008	3407.43	40.75	NM	NA	3366.68
MW055SA	03/11/2009	3407.43	40.79	NM	NA	3366.64
MW055SA	07/29/2009	3407.43	40.85	NM	NA	3366.58
MW055SA	03/01/2010	3407.43	40.87	NM	NA	3366.56
MW055SA	07/30/2010	3407.43	40.76	NM	NA	3366.67
MW055SA	05/03/2011	3407.43	40.84	NM	NA	3366.59
MW055SA	11/03/2011	3407.43	40.90	NM	NA	3366.53
MW055SA	05/02/2012	3407.43	40.85	NM	NA	3366.58
MW055SA	10/23/2012	3407.43	40.93	NM	NA	3366.50
MW055SA	04/29/2013	3407.43	40.93	NM	NA	3366.50
MW055SA	10/28/2013	3407.43	41.08	NM	NA	3366.35
MW055SA	05/05/2014	3407.43	40.97	NM	NA	3366.46
MW055SA	11/03/2014	3407.43	40.93	NM	NA	3366.50
MW055SA	05/05/2015	3407.43	40.81	NM	NA	3366.62
MW055SA	11/02/2015	3407.43	40.84	NM	NA	3366.59
MW055SA	05/11/2016	3407.43	40.69	NM	NA	3366.74
MW055SA	09/15/2016	3407.43	40.75	NM	NA	3366.68
MW055SA	05/01/2017	3407.43	40.55	NM	NA	3366.88
MW055SA	09/14/2017	3407.43	40.54	NM	NA	3366.89
MW055SA	03/20/2018	3407.43	40.59	NM	NA	3366.84
MW055SA	09/12/2018	3407.43	40.75	NM	NA	3366.68
MW055SA	04/09/2019	3407.43	40.51	NM	NA	3366.92
MW055SA	10/07/2019	3407.43	40.76	NM	NA	3366.67
MW056SA	01/07/2003	3410.71	46.32	NM	NA	3364.39
MW056SA	01/30/2003	3410.71	46.21	NM	NA	3364.50
MW056SA	03/28/2003	3410.71	46.20	NM	NA	3364.51
MW056SA	05/19/2003	3410.71	46.18	NM	NA	3364.53
MW056SA	09/08/2003	3410.71	46.31	NM	NA	3364.40
MW056SA	12/02/2003	3410.71	46.33	NM	NA	3364.38
MW056SA	03/30/2004	3410.71	46.40	NM	NA	3364.31
MW056SA	06/07/2004	3410.71	46.31	NM	NA	3364.40
MW056SA	09/14/2004	3410.71	46.38	NM	NA	3364.33
MW056SA	11/29/2004	3410.71	46.31	NM	NA	3364.40
MW056SA	03/31/2005	3410.71	46.01	NM	NA	3364.70
MW056SA	05/23/2005	3410.71	45.93	NM	NA	3364.78
MW056SA	01/17/2006	3410.71	45.62	NM	NA	3365.09
MW056SA	06/15/2006	3410.71	45.42	NM	NA	3365.29
MW056SA	04/11/2007	3410.71	44.91	NM	NA	3365.80
MW056SA	09/20/2007	3410.71	44.67	NM	NA	3366.04
MW056SA	03/19/2008	3410.71	44.69	NM	NA	3366.02
MW056SA	08/04/2008	3410.71	44.79	NM	NA	3365.92
MW056SA	03/11/2009	3410.71	44.92	NM	NA	3365.79
MW056SA	07/29/2009	3410.71	44.93	NM	NA	3365.78
MW056SA	03/01/2010	3410.71	44.94	NM	NA	3365.77
MW056SA	07/30/2010	3410.71	44.88	NM	NA	3365.83
MW056SA	11/04/2011	3410.71	45.14	NM	NA	3365.57
MW056SA	05/02/2012	3410.71	45.16	NM	NA	3365.55
MW056SA	10/23/2012	3410.71	43.30	NM	NA	3367.41
MW056SA	04/29/2013	3410.71	43.36	NM	NA	3367.35
MW056SA	10/29/2013	3410.71	43.65	NM	NA	3367.06
MW056SA	05/05/2014	3410.71	43.44	NM	NA	3367.27
MW056SA	11/03/2014	3410.71	43.28	NM	NA	3367.43
MW056SA	05/05/2015	3410.71	43.02	NM	NA	3367.69
MW056SA	11/02/2015	3410.71	43.00	NM	NA	3367.71

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW056SA	05/11/2016	3410.71	42.73	NM	NA	3367.98
MW056SA	09/15/2016	3410.71	42.71	NM	NA	3368.00
MW056SA	05/01/2017	3410.71	42.17	NM	NA	3368.54
MW056SA	09/20/2017	3410.71	42.31	NM	NA	3368.40
MW056SA	03/20/2018	3410.71	42.08	NM	NA	3368.63
MW056SA	09/12/2018	3410.71	42.31	NM	NA	3368.40
MW056SA	04/09/2019	3410.71	40.95	NM	NA	3369.76
MW056SA	10/07/2019	3410.71	42.07	NM	NA	3368.64
MW057SA	01/30/2003	3417.74	46.33	NM	NA	3371.41
MW057SA	03/28/2003	3417.74	46.45	NM	NA	3371.29
MW057SA	05/19/2003	3417.74	46.59	NM	NA	3371.15
MW057SA	09/08/2003	3417.74	46.72	NM	NA	3371.02
MW057SA	12/02/2003	3417.74	46.65	NM	NA	3371.09
MW057SA	03/30/2004	3417.74	46.70	NM	NA	3371.04
MW057SA	06/07/2004	3417.74	46.75	NM	NA	3370.99
MW057SA	09/14/2004	3417.74	46.58	NM	NA	3371.16
MW057SA	11/30/2004	3417.74	46.00	NM	NA	3371.74
MW057SA	03/31/2005	3417.74	45.77	NM	NA	3371.97
MW057SA	05/23/2005	3417.74	45.73	NM	NA	3372.01
MW057SA	01/17/2006	3417.74	45.53	NM	NA	3372.21
MW057SA	06/14/2006	3417.74	45.50	NM	NA	3372.24
MW057SA	03/29/2007	3417.74	44.91	NM	NA	3372.83
MW057SA	09/11/2007	3417.74	44.96	NM	NA	3372.78
MW057SA	03/18/2008	3417.74	45.05	NM	NA	3372.69
MW057SA	08/04/2008	3417.74	45.34	NM	NA	3372.40
MW057SA	03/10/2009	3417.74	45.58	NM	NA	3372.16
MW057SA	07/28/2009	3417.74	45.58	NM	NA	3372.16
MW057SA	03/01/2010	3417.74	45.47	NM	NA	3372.27
MW057SA	07/30/2010	3417.74	45.76	NM	NA	3371.98
MW057SA	11/02/2011	3417.74	45.83	NM	NA	3371.91
MW057SA	05/17/2012	3417.74	46.14	NM	NA	3371.60
MW057SA	10/23/2012	3417.74	46.51	NM	NA	3371.23
MW057SA	04/29/2013	3417.74	46.50	NM	NA	3371.24
MW057SA	10/28/2013	3417.74	46.60	NM	NA	3371.14
MW057SA	05/05/2014	3417.74	46.71	NM	NA	3371.03
MW057SA	11/03/2014	3417.74	46.19	NM	NA	3371.55
MW057SA	05/05/2015	3417.74	45.81	NM	NA	3371.93
MW057SA	11/02/2015	3417.74	45.95	NM	NA	3371.79
MW057SA	05/11/2016	3417.74	45.74	NM	NA	3372.00
MW057SA	09/15/2016	3417.74	45.76	NM	NA	3371.98
MW057SA	05/01/2017	3417.74	45.26	NM	NA	3372.48
MW057SA	09/14/2017	3417.74	45.64	NM	NA	3372.10
MW057SA	03/20/2018	3417.74	45.17	NM	NA	3372.57
MW057SA	09/12/2018	3417.74	45.59	NM	NA	3372.15
MW057SA	04/09/2019	3417.74	44.86	NM	NA	3372.88
MW057SA	10/07/2019	3417.74	45.14	NM	NA	3372.60
MW058	01/31/2003	3437.13	58.49	NM	NA	3378.64
MW058	03/27/2003	3437.13	58.49	NM	NA	3378.64
MW058	05/19/2003	3437.13	58.52	NM	NA	3378.61
MW058	09/09/2003	3437.13	58.57	NM	NA	3378.56
MW058	12/02/2003	3437.13	58.44	NM	NA	3378.69
MW058	03/30/2004	3437.13	58.51	NM	NA	3378.62
MW058	06/07/2004	3437.13	58.50	NM	NA	3378.63
MW058	09/16/2004	3437.13	58.42	NM	NA	3378.71
MW058	11/29/2004	3437.13	58.43	NM	NA	3378.70
MW058	03/31/2005	3437.13	59.08	NM	NA	3378.05
MW058	05/23/2005	3437.13	57.84	NM	NA	3379.29
MW058	01/17/2006	3437.13	57.43	NM	NA	3379.70
MW058	06/14/2006	3437.13	57.10	NM	NA	3380.03
MW058	04/23/2007	3437.13	56.20	NM	NA	3380.93
MW058	09/13/2007	3437.13	56.58	NM	NA	3380.55
MW058	03/19/2008	3437.13	56.46	NM	NA	3380.67
MW058	08/04/2008	3437.13	56.47	NM	NA	3380.66
MW058	03/11/2009	3437.13	56.52	NM	NA	3380.61
MW058	07/29/2009	3437.13	56.56	NM	NA	3380.57
MW058	03/01/2010	3437.13	56.65	NM	NA	3380.48
MW058	08/02/2010	3437.13	56.64	NM	NA	3380.49
MW058	05/05/2011	3437.13	56.50	NM	NA	3380.63
MW058	11/01/2011	3437.13	56.51	NM	NA	3380.62
MW058	05/01/2012	3437.13	56.50	NM	NA	3380.63

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW058	10/24/2012	3437.13	56.57	NM	NA	3380.56
MW058	05/01/2013	3437.13	56.80	NM	NA	3380.33
MW058	10/28/2013	3437.13	56.83	NM	NA	3380.30
MW058	05/05/2014	3437.13	56.89	NM	NA	3380.24
MW058	11/03/2014	3437.13	56.90	NM	NA	3380.23
MW058	05/06/2015	3437.13	56.65	NM	NA	3380.48
MW058	11/03/2015	3437.13	56.58	NM	NA	3380.55
MW058	05/10/2016	3437.13	56.49	NM	NA	3380.64
MW058	09/22/2016	3437.13	56.43	NM	NA	3380.70
MW058	05/02/2017	3437.13	56.20	NM	NA	3380.93
MW058	03/20/2018	3437.13	55.97	NM	NA	3381.16
MW058	04/10/2019	3437.13	55.77	NM	NA	3381.36
MW059	01/31/2003	3442.22	63.28	NM	NA	3378.94
MW059	03/28/2003	3442.22	63.23	NM	NA	3378.99
MW059	05/19/2003	3442.22	63.15	NM	NA	3379.07
MW059	09/09/2003	3442.22	63.15	NM	NA	3379.07
MW059	12/02/2003	3442.22	63.05	NM	NA	3379.17
MW059	03/30/2004	3442.22	63.06	NM	NA	3379.16
MW059	06/07/2004	3442.22	63.00	NM	NA	3379.22
MW059	09/17/2004	3442.22	63.03	NM	NA	3379.19
MW059	11/30/2004	3442.22	62.96	NM	NA	3379.26
MW059	03/31/2005	3442.22	62.75	NM	NA	3379.47
MW059	05/23/2005	3442.22	62.51	NM	NA	3379.71
MW059	01/17/2006	3442.22	62.28	NM	NA	3379.94
MW059	06/14/2006	3442.22	61.96	NM	NA	3380.26
MW059	03/28/2007	3442.22	61.61	NM	NA	3380.61
MW059	09/11/2007	3442.22	61.39	NM	NA	3380.83
MW059	03/19/2008	3442.22	61.30	NM	NA	3380.92
MW059	08/04/2008	3442.22	61.20	NM	NA	3381.02
MW059	03/11/2009	3442.22	61.33	NM	NA	3380.89
MW059	07/29/2009	3442.22	61.32	NM	NA	3380.90
MW059	03/01/2010	3442.22	61.40	NM	NA	3380.82
MW059	08/03/2010	3442.22	61.38	NM	NA	3380.84
MW059	05/04/2011	3442.22	61.27	NM	NA	3380.95
MW059	11/01/2011	3442.24	61.24	NM	NA	3381.00
MW059	05/04/2012	3442.24	61.32	NM	NA	3380.92
MW059	10/25/2012	3442.24	61.40	NM	NA	3380.84
MW059	05/01/2013	3442.24	61.48	NM	NA	3380.76
MW059	10/28/2013	3442.24	61.47	NM	NA	3380.77
MW059	05/05/2014	3442.24	61.55	NM	NA	3380.69
MW059	11/03/2014	3442.24	61.60	NM	NA	3380.64
MW059	05/06/2015	3442.24	61.33	NM	NA	3380.91
MW059	11/02/2015	3442.24	61.24	NM	NA	3381.00
MW059	05/11/2016	3442.24	61.23	NM	NA	3381.01
MW059	09/22/2016	3442.24	61.21	NM	NA	3381.03
MW059	05/02/2017	3442.24	61.00	NM	NA	3381.24
MW059	09/18/2017	3442.24	60.90	NM	NA	3381.34
MW059	03/20/2018	3442.24	60.72	NM	NA	3381.52
MW059	09/13/2018	3442.24	60.71	NM	NA	3381.53
MW059	04/10/2019	3442.24	60.51	NM	NA	3381.73
MW059	10/07/2019	3442.24	60.62	NM	NA	3381.62
MW060	01/08/2003	3437.7	58.62	NM	NA	3379.08
MW060	01/30/2003	3437.7	58.38	NM	NA	3379.32
MW060	03/28/2003	3437.7	58.45	NM	NA	3379.25
MW060	05/19/2003	3437.7	58.39	NM	NA	3379.31
MW060	09/09/2003	3437.7	58.34	NM	NA	3379.36
MW060	12/02/2003	3437.7	58.15	NM	NA	3379.55
MW060	03/30/2004	3437.7	58.20	NM	NA	3379.50
MW060	06/07/2004	3437.7	58.19	NM	NA	3379.51
MW060	09/16/2004	3437.7	58.12	NM	NA	3379.58
MW060	11/29/2004	3437.7	58.11	NM	NA	3379.59
MW060	03/31/2005	3437.7	57.79	NM	NA	3379.91
MW060	05/23/2005	3437.7	57.63	NM	NA	3380.07
MW060	01/17/2006	3437.7	57.33	NM	NA	3380.37
MW060	06/16/2006	3437.7	57.13	NM	NA	3380.57
MW060	03/28/2007	3437.7	56.80	NM	NA	3380.90
MW060	09/13/2007	3437.7	56.57	NM	NA	3381.13
MW060	03/18/2008	3437.7	56.46	NM	NA	3381.24
MW060	08/04/2008	3437.7	56.57	NM	NA	3381.13
MW060	03/10/2009	3437.7	66.55	NM	NA	3371.15

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW060	07/28/2009	3437.7	56.60	NM	NA	3381.10
MW060	03/01/2010	3437.7	56.73	NM	NA	3380.97
MW060	08/02/2010	3437.7	56.74	NM	NA	3380.96
MW060	05/04/2011	3437.7	56.57	NM	NA	3381.13
MW060	11/01/2011	3437.7	56.50	NM	NA	3381.20
MW060	05/01/2012	3437.7	56.59	NM	NA	3381.11
MW060	10/24/2012	3437.7	56.62	NM	NA	3381.08
MW060	05/01/2013	3437.7	56.82	NM	NA	3380.88
MW060	10/28/2013	3437.7	56.80	NM	NA	3380.90
MW060	05/05/2014	3437.7	56.88	NM	NA	3380.82
MW060	11/03/2014	3437.7	56.88	NM	NA	3380.82
MW060	05/06/2015	3437.7	56.20	NM	NA	3381.50
MW060	11/03/2015	3437.7	56.60	NM	NA	3381.10
MW060	03/20/2018	3437.7	56.08	NM	NA	3381.62
MW060	09/13/2018	3437.7	56.01	NM	NA	3381.69
MW060**	09/18/2017	3437.7	46.2	NM	NA	3391.50
MW060	04/10/2019	3437.70	55.81	NM	NA	3381.89
MW060	10/07/2019	3437.70	55.97	NM	NA	3381.73
MW061	01/08/2003	3439.86	60.23	NM	NA	3379.63
MW061	03/27/2003	3439.86	60.20	NM	NA	3379.66
MW061	05/19/2003	3439.86	60.26	NM	NA	3379.60
MW061	09/09/2003	3439.86	60.18	NM	NA	3379.68
MW061	12/02/2003	3439.86	60.00	NM	NA	3379.86
MW061	03/30/2004	3439.86	60.12	NM	NA	3379.74
MW061	06/07/2004	3439.86	60.06	NM	NA	3379.80
MW061	09/16/2004	3439.86	59.93	NM	NA	3379.93
MW061	11/29/2004	3439.86	59.84	NM	NA	3380.02
MW061	03/31/2005	3439.86	59.52	NM	NA	3380.34
MW061	05/23/2005	3439.86	59.32	NM	NA	3380.54
MW061	01/17/2006	3439.86	58.90	NM	NA	3380.96
MW061	06/15/2006	3439.86	58.81	NM	NA	3381.05
MW061	04/18/2007	3439.86	58.54	NM	NA	3381.32
MW061	09/20/2007	3439.86	58.39	NM	NA	3381.47
MW061	03/18/2008	3439.86	58.34	NM	NA	3381.52
MW061	08/04/2008	3439.86	58.55	NM	NA	3381.31
MW061	03/11/2009	3439.86	58.59	NM	NA	3381.27
MW061	07/29/2009	3439.86	58.65	NM	NA	3381.21
MW061	03/01/2010	3439.86	58.77	NM	NA	3381.09
MW061	08/03/2010	3439.86	58.72	NM	NA	3381.14
MW061	05/03/2011	3439.86	58.55	NM	NA	3381.31
MW061	11/01/2011	3439.86	58.48	NM	NA	3381.38
MW061	05/01/2012	3439.86	58.67	NM	NA	3381.19
MW061	10/24/2012	3439.86	58.72	NM	NA	3381.14
MW061	04/30/2013	3439.86	58.81	NM	NA	3381.05
MW061	10/28/2013	3439.86	58.89	NM	NA	3380.97
MW061	05/05/2014	3439.86	58.95	NM	NA	3380.91
MW061	11/03/2014	3439.86	58.90	NM	NA	3380.96
MW061	05/06/2015	3439.86	58.71	NM	NA	3381.15
MW061	11/03/2015	3439.86	58.62	NM	NA	3381.24
MW061	05/09/2016	3439.86	58.60	NM	NA	3381.26
MW061	09/22/2016	3439.86	56.21	NM	NA	3383.65
MW061	05/02/2017	3439.86	55.81	NM	NA	3384.05
MW061	03/20/2018	3439.86	55.55	NM	NA	3384.31
MW061	09/13/2018	3439.86	55.41	NM	NA	3384.45
MW061**	09/18/2017	3439.86	55.77	NM	NA	3384.09
MW061	04/10/2019	3439.86	55.26	NM	NA	3384.60
MW061	10/08/2019	3439.86	55.34	NM	NA	3384.52
MW062A	01/31/2003	3434.19	57.13	NM	NA	3377.06
MW062A	03/27/2003	3434.19	57.16	NM	NA	3377.03
MW062A	05/19/2003	3434.19	57.19	NM	NA	3377.00
MW062A	09/09/2003	3434.19	57.29	NM	NA	3376.90
MW062A	12/02/2003	3434.19	57.17	NM	NA	3377.02
MW062A	03/30/2004	3434.19	57.35	NM	NA	3376.84
MW062A	06/07/2004	3434.19	57.40	NM	NA	3376.79
MW062A	09/16/2004	3434.19	57.18	NM	NA	3377.01
MW062A	11/29/2004	3434.19	57.08	NM	NA	3377.11
MW062A	03/31/2005	3434.19	56.64	NM	NA	3377.55
MW062A	05/23/2005	3434.19	56.51	NM	NA	3377.68
MW062A	01/17/2006	3434.19	55.93	NM	NA	3378.26
MW062A	06/14/2006	3434.19	55.52	NM	NA	3378.67

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW062A	04/20/2007	3434.19	55.17	NM	NA	3379.02
MW062A	09/13/2007	3434.19	55.17	NM	NA	3379.02
MW062A	03/18/2008	3434.19	55.13	NM	NA	3379.06
MW062A	08/04/2008	3434.19	55.25	NM	NA	3378.94
MW062A	03/11/2009	3434.19	55.39	NM	NA	3378.80
MW062A	07/28/2009	3434.19	55.45	NM	NA	3378.74
MW062A	03/01/2010	3434.19	55.45	NM	NA	3378.74
MW062A	08/02/2010	3434.19	55.50	NM	NA	3378.69
MW062A	05/03/2011	3434.19	55.28	NM	NA	3378.91
MW062A	11/02/2011	3434.19	55.56	NM	NA	3378.63
MW062A	05/01/2012	3434.19	55.50	NM	NA	3378.69
MW062A	10/24/2012	3434.19	55.72	NM	NA	3378.47
MW062A	05/01/2013	3434.19	55.87	NM	NA	3378.32
MW062A	10/28/2013	3434.19	55.99	NM	NA	3378.20
MW062A	05/05/2014	3434.19	56.02	NM	NA	3378.17
MW062A	11/03/2014	3434.19	55.95	NM	NA	3378.24
MW062A	05/06/2015	3434.19	55.59	NM	NA	3378.60
MW062A	11/03/2015	3434.19	55.57	NM	NA	3378.62
MW062A	05/10/2016	3434.19	55.37	NM	NA	3378.82
MW062A	09/22/2016	3434.19	55.39	NM	NA	3378.80
MW062A	05/02/2017	3434.19	55.06	NM	NA	3379.13
MW062A	09/18/2017	3434.19	55.01	NM	NA	3379.18
MW062A	03/20/2018	3434.19	54.83	NM	NA	3379.36
MW062A	09/12/2018	3434.19	54.96	NM	NA	3379.23
MW062A	04/09/2019	3434.19	54.64	NM	NA	3379.55
MW062A	10/07/2019	3434.19	54.84	NM	NA	3379.35
MW063A	01/31/2003	3435.22	57.89	NM	NA	3377.33
MW063A	03/27/2003	3435.22	57.80	NM	NA	3377.42
MW063A	05/19/2003	3435.22	57.82	NM	NA	3377.40
MW063A	09/09/2003	3435.22	57.89	NM	NA	3377.33
MW063A	12/02/2003	3435.22	57.78	NM	NA	3377.44
MW063A	03/30/2004	3435.22	57.97	NM	NA	3377.25
MW063A	06/07/2004	3435.22	57.93	NM	NA	3377.29
MW063A	09/16/2004	3435.22	57.81	NM	NA	3377.41
MW063A	11/29/2004	3435.22	57.78	NM	NA	3377.44
MW063A	03/31/2005	3435.22	54.53	NM	NA	3380.69
MW063A	05/23/2005	3435.22	57.20	NM	NA	3378.02
MW063A	01/17/2006	3435.22	56.80	NM	NA	3378.42
MW063A	06/14/2006	3435.22	56.44	NM	NA	3378.78
MW063A	04/20/2007	3435.22	56.02	NM	NA	3379.20
MW063A	09/10/2007	3435.22	55.92	NM	NA	3379.30
MW063A	03/18/2008	3435.22	55.89	NM	NA	3379.33
MW063A	08/04/2008	3435.22	55.98	NM	NA	3379.24
MW063A	03/11/2009	3435.22	56.02	NM	NA	3379.20
MW063A	07/28/2009	3435.22	56.05	NM	NA	3379.17
MW063A	03/01/2010	3435.22	56.05	NM	NA	3379.17
MW063A	08/02/2010	3435.22	56.08	NM	NA	3379.14
MW063A	05/03/2011	3435.22	55.90	NM	NA	3379.32
MW063A	11/02/2011	3435.22	56.04	NM	NA	3379.18
MW063A	05/01/2012	3435.22	56.00	NM	NA	3379.22
MW063A	10/24/2012	3435.22	56.13	NM	NA	3379.09
MW063A	05/01/2013	3435.22	56.30	NM	NA	3378.92
MW063A	10/28/2013	3435.22	56.41	NM	NA	3378.81
MW063A	05/05/2014	3435.22	56.42	NM	NA	3378.80
MW063A	11/03/2014	3435.22	56.43	NM	NA	3378.79
MW063A	05/06/2015	3435.22	56.12	NM	NA	3379.10
MW063A	11/03/2015	3435.22	56.09	NM	NA	3379.13
MW063A	05/10/2016	3435.22	55.92	NM	NA	3379.30
MW063A	09/22/2016	3435.22	55.95	NM	NA	3379.27
MW063A	05/02/2017	3435.22	55.70	NM	NA	3379.52
MW063A	09/18/2017	3435.22	55.65	NM	NA	3379.57
MW063A	03/20/2018	3435.22	55.48	NM	NA	3379.74
MW063A	09/12/2018	3435.22	55.52	NM	NA	3379.70
MW063A	04/09/2019	3435.22	55.22	NM	NA	3380.00
MW063A	10/07/2019	3435.22	55.43	NM	NA	3379.79
MW064SA	03/27/2003	3405.15	54.20	NM	NA	3350.95
MW064SA	05/19/2003	3405.15	54.22	NM	NA	3350.93
MW064SA	09/08/2003	3405.15	54.27	NM	NA	3350.88
MW064SA	12/02/2003	3405.15	54.35	NM	NA	3350.80
MW064SA	03/30/2004	3405.15	54.39	NM	NA	3350.76

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW064SA	06/07/2004	3405.15	54.40	NM	NA	3350.75
MW064SA	09/14/2004	3405.15	54.36	NM	NA	3350.79
MW064SA	11/29/2004	3405.15	54.24	NM	NA	3350.91
MW064SA	03/24/2005	3405.15	54.91	NM	NA	3350.24
MW064SA	05/23/2005	3405.15	53.69	NM	NA	3351.46
MW064SA	01/17/2006	3405.15	53.09	NM	NA	3352.06
MW064SA	06/14/2006	3405.15	52.67	NM	NA	3352.48
MW064SA	09/05/2007	3405.15	51.52	NM	NA	3353.63
MW064SA	03/19/2008	3405.15	51.21	NM	NA	3353.94
MW064SA	08/04/2008	3405.15	51.11	NM	NA	3354.04
MW064SA	03/11/2009	3405.15	51.16	NM	NA	3353.99
MW064SA	07/29/2009	3405.15	51.05	NM	NA	3354.10
MW064SA	03/01/2010	3405.15	51.07	NM	NA	3354.08
MW064SA	07/30/2010	3405.15	50.99	NM	NA	3354.16
MW064SA	05/04/2011	3405.15	51.09	NM	NA	3354.06
MW064SA	11/02/2011	3405.15	51.29	NM	NA	3353.86
MW064SA	05/02/2012	3405.15	51.33	NM	NA	3353.82
MW064SA	10/23/2012	3405.15	51.36	NM	NA	3353.79
MW064SA	04/29/2013	3405.15	51.31	NM	NA	3353.84
MW065SA	03/27/2003	3402.96	54.21	NM	NA	3348.75
MW065SA	05/19/2003	3402.96	54.23	NM	NA	3348.73
MW065SA	09/08/2003	3402.96	54.38	NM	NA	3348.58
MW065SA	12/02/2003	3402.96	54.51	NM	NA	3348.45
MW065SA	03/30/2004	3402.96	54.61	NM	NA	3348.35
MW065SA	06/07/2004	3402.96	54.32	NM	NA	3348.64
MW065SA	09/14/2004	3402.96	54.45	NM	NA	3348.51
MW065SA	11/30/2004	3402.96	54.31	NM	NA	3348.65
MW065SA	03/31/2005	3402.96	53.92	NM	NA	3349.04
MW065SA	05/23/2005	3402.96	53.66	NM	NA	3349.30
MW065SA	01/17/2006	3402.96	52.99	NM	NA	3349.97
MW065SA	06/15/2006	3402.96	52.62	NM	NA	3350.34
MW065SA	04/10/2007	3402.96	52.12	NM	NA	3350.84
MW065SA	09/11/2007	3402.96	51.59	NM	NA	3351.37
MW065SA	03/19/2008	3402.96	51.39	NM	NA	3351.57
MW065SA	08/04/2008	3402.96	51.30	NM	NA	3351.66
MW065SA	03/11/2009	3402.96	51.52	NM	NA	3351.44
MW065SA	07/29/2009	3402.96	51.32	NM	NA	3351.64
MW065SA	03/01/2010	3402.96	51.39	NM	NA	3351.57
MW065SA	07/30/2010	3402.96	51.30	NM	NA	3351.66
MW065SA	05/04/2011	3402.96	51.48	NM	NA	3351.48
MW065SA	11/03/2011	3402.96	51.81	NM	NA	3351.15
MW065SA	05/01/2012	3402.96	51.72	NM	NA	3351.24
MW065SA	10/23/2012	3402.96	51.69	NM	NA	3351.27
MW065SA	04/29/2013	3402.96	51.64	NM	NA	3351.32
MW065SA	10/28/2013	3402.96	51.85	NM	NA	3351.11
MW065SA	05/05/2014	3402.96	51.48	NM	NA	3351.48
MW065SA	11/03/2014	3402.96	51.53	NM	NA	3351.43
MW065SA	05/05/2015	3402.96	51.05	NM	NA	3351.91
MW065SA	11/02/2015	3402.96	51.01	NM	NA	3351.95
MW065SA	05/11/2016	3402.96	50.43	NM	NA	3352.53
MW065SA	09/14/2016	3402.96	50.48	NM	NA	3352.48
MW065SA	05/01/2017	3402.96	49.87	NM	NA	3353.09
MW065SA	03/20/2018	3402.96	49.51	NM	NA	3353.45
MW065SA	04/09/2019	3402.96	48.71	NM	NA	3354.25
MW066SA	03/28/2003	3404.03	52.45	NM	NA	3351.58
MW066SA	05/19/2003	3404.03	52.24	NM	NA	3351.79
MW066SA	09/08/2003	3404.03	52.71	NM	NA	3351.32
MW066SA	12/02/2003	3404.03	53.00	NM	NA	3351.03
MW066SA	03/30/2004	3404.03	53.16	NM	NA	3350.87
MW066SA	06/07/2004	3404.03	52.88	NM	NA	3351.15
MW066SA	09/14/2004	3404.03	55.30	NM	NA	3348.73
MW066SA	11/29/2004	3404.03	53.24	NM	NA	3350.79
MW066SA	03/29/2005	3404.03	52.71	NM	NA	3351.32
MW066SA	05/23/2005	3404.03	52.36	NM	NA	3351.67
MW066SA	01/17/2006	3404.03	51.15	NM	NA	3352.88
MW066SA	06/15/2006	3404.03	50.35	NM	NA	3353.68
MW066SA	04/05/2007	3404.03	49.45	NM	NA	3354.58
MW066SA	09/19/2007	3404.03	48.63	NM	NA	3355.40
MW066SA	03/18/2008	3404.03	48.25	NM	NA	3355.78
MW066SA	08/04/2008	3404.03	48.99	NM	NA	3355.04

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW066SA	03/10/2009	3404.03	49.00	NM	NA	3355.03
MW066SA	07/29/2009	3404.03	49.32	NM	NA	3354.71
MW066SA	03/01/2010	3404.03	49.53	NM	NA	3354.50
MW066SA	07/30/2010	3404.03	49.38	NM	NA	3354.65
MW066SA	05/04/2011	3404.03	49.67	NM	NA	3354.36
MW066SA	11/03/2011	3404.03	50.47	NM	NA	3353.56
MW066SA	05/02/2012	3404.03	50.24	NM	NA	3353.79
MW066SA	10/23/2012	3404.03	50.56	NM	NA	3353.47
MW066SA	04/29/2013	3404.03	50.20	NM	NA	3353.83
MW066SA	10/29/2013	3404.03	50.81	NM	NA	3353.22
MW066SA	05/05/2014	3404.03	50.09	NM	NA	3353.94
MW066SA	11/03/2014	3404.03	50.45	NM	NA	3353.58
MW066SA	05/05/2015	3404.03	49.14	NM	NA	3354.89
MW066SA	11/02/2015	3404.03	49.22	NM	NA	3354.81
MW066SA	05/10/2016	3404.03	47.86	NM	NA	3356.17
MW066SA	09/15/2016	3404.03	44.34	NM	NA	3359.69
MW066SA	05/01/2017	3404.03	46.68	NM	NA	3357.35
MW066SA	09/14/2017	3404.03	46.45	NM	NA	3357.58
MW066SA	03/20/2018	3404.03	45.66	NM	NA	3358.37
MW066SA	09/12/2018	3404.03	45.99	NM	NA	3358.04
MW066SA	04/09/2019	3404.03	44.19	NM	NA	3359.84
MW066SA	10/07/2019	3404.03	45.09	NM	NA	3358.94
MW067SA	03/28/2003	3409.16	47.64	NM	NA	3361.52
MW067SA	05/19/2003	3409.16	47.61	NM	NA	3361.55
MW067SA	09/08/2003	3409.16	48.19	NM	NA	3360.97
MW067SA	12/02/2003	3409.16	48.25	NM	NA	3360.91
MW067SA	03/30/2004	3409.16	48.34	NM	NA	3360.82
MW067SA	06/07/2004	3409.16	48.10	NM	NA	3361.06
MW067SA	09/14/2004	3409.16	48.26	NM	NA	3360.90
MW067SA	01/17/2006	3409.16	45.90	NM	NA	3363.26
MW067SA	06/16/2006	3409.16	46.02	NM	NA	3363.14
MW067SA	04/05/2007	3409.16	45.46	NM	NA	3363.70
MW067SA	09/12/2007	3409.16	45.38	NM	NA	3363.78
MW067SA	03/18/2008	3409.16	45.34	NM	NA	3363.82
MW067SA	08/04/2008	3409.16	46.06	NM	NA	3363.10
MW067SA	03/10/2009	3409.16	45.81	NM	NA	3363.35
MW067SA	07/28/2009	3409.16	46.35	NM	NA	3362.81
MW067SA	03/01/2010	3409.16	46.31	NM	NA	3362.85
MW067SA	08/03/2010	3409.16	46.37	NM	NA	3362.79
MW067SA	05/05/2011	3409.16	46.54	NM	NA	3362.62
MW067SA	11/03/2011	3409.16	47.18	NM	NA	3361.98
MW067SA	05/02/2012	3409.16	46.89	NM	NA	3362.27
MW067SA	10/23/2012	3409.16	47.25	NM	NA	3361.91
MW067SA	04/29/2013	3409.16	46.95	NM	NA	3362.21
MW067SA	10/29/2013	3409.16	47.54	NM	NA	3361.62
MW067SA	05/05/2014	3409.16	47.00	NM	NA	3362.16
MW067SA	11/03/2014	3409.16	47.22	NM	NA	3361.94
MW067SA	05/05/2015	3409.16	46.30	NM	NA	3362.86
MW067SA	11/03/2015	3409.16	46.50	NM	NA	3362.66
MW067SA	05/10/2016	3409.16	45.65	NM	NA	3363.51
MW067SA	09/22/2016	3409.16	46.12	NM	NA	3363.04
MW067SA	05/01/2017	3409.16	44.82	NM	NA	3364.34
MW067SA	09/14/2017	3409.16	45.01	NM	NA	3364.15
MW067SA	03/20/2018	3409.16	44.20	NM	NA	3364.96
MW067SA	09/10/2018	3409.16	45.76	NM	NA	3363.40
MW067SA	04/09/2019	3409.16	43.05	NM	NA	3366.11
MW067SA	10/07/2019	3409.16	44.42	NM	NA	3364.74
MW068	03/27/2003	3448.08	67.61	NM	NA	3380.47
MW068	05/19/2003	3448.08	68.70	NM	NA	3379.38
MW068	09/09/2003	3448.08	68.67	NM	NA	3379.41
MW068	12/02/2003	3448.08	68.51	NM	NA	3379.57
MW068	03/30/2004	3448.08	68.52	NM	NA	3379.56
MW068	06/07/2004	3448.08	68.45	NM	NA	3379.63
MW068	09/16/2004	3448.18	68.30	NM	NA	3379.88
MW068	11/29/2004	3448.08	68.19	NM	NA	3379.89
MW068	03/31/2005	3448.08	67.90	NM	NA	3380.18
MW068	05/23/2005	3448.08	67.78	NM	NA	3380.30
MW068	01/17/2006	3448.08	67.40	NM	NA	3380.68
MW068	06/14/2006	3448.08	67.30	NM	NA	3380.78
MW068	03/22/2007	3448.08	67.04	NM	NA	3381.04

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW068	09/06/2007	3448.08	66.78	NM	NA	3381.30
MW068	03/18/2008	3448.08	66.80	NM	NA	3381.28
MW068	08/04/2008	3448.08	67.09	NM	NA	3380.99
MW068	03/10/2009	3448.08	66.94	NM	NA	3381.14
MW068	07/28/2009	3448.08	67.02	NM	NA	3381.06
MW068	03/01/2010	3448.08	67.12	NM	NA	3380.96
MW068	08/03/2010	3448.08	67.99	NM	NA	3380.09
MW068	05/03/2011	3448.08	66.87	NM	NA	3381.21
MW068	11/01/2011	3448.08	66.85	NM	NA	3381.23
MW068	05/02/2012	3448.08	67.04	NM	NA	3381.04
MW068	10/24/2012	3448.08	67.03	NM	NA	3381.05
MW068	04/30/2013	3448.08	67.11	NM	NA	3380.97
MW068	10/28/2013	3448.08	67.12	NM	NA	3380.96
MW068	05/05/2014	3448.08	67.20	NM	NA	3380.88
MW068	11/03/2014	3448.08	67.09	NM	NA	3380.99
MW068	05/06/2015	3448.08	62.00	NM	NA	3386.08
MW068	09/16/2015	3448.08	67.09	NM	NA	3380.99
MW068	11/03/2015	3448.08	66.89	NM	NA	3381.19
MW068	05/09/2016	3448.08	64.94	NM	NA	3383.14
MW068	05/02/2017	3449.21	66.67	NM	NA	3382.54
MW068	09/22/2017	3448.08	66.80	NM	NA	3381.28
MW068	03/20/2018	3448.08	66.57	NM	NA	3381.51
MW068	09/13/2018	3448.08	66.54	NM	NA	3381.54
MW068	04/10/2019	3448.08	66.31	NM	NA	3381.77
MW068	10/07/2019	3448.08	66.44	NM	NA	3381.64
MW069	03/27/2003	3444.07	64.89	NM	NA	3379.18
MW069	05/19/2003	3444.07	64.83	NM	NA	3379.24
MW069	09/09/2003	3444.07	64.79	NM	NA	3379.28
MW069	12/02/2003	3444.07	64.63	NM	NA	3379.44
MW069	03/30/2004	3444.07	64.65	NM	NA	3379.42
MW069	06/07/2004	3444.07	64.63	NM	NA	3379.44
MW069	09/16/2004	3444.07	64.60	NM	NA	3379.47
MW069	11/29/2004	3444.07	64.51	NM	NA	3379.56
MW069	03/31/2005	3444.07	64.24	NM	NA	3379.83
MW069	05/23/2005	3444.07	64.08	NM	NA	3379.99
MW069	01/17/2006	3444.07	63.82	NM	NA	3380.25
MW069	06/14/2006	3444.07	63.66	NM	NA	3380.41
MW069	09/06/2007	3444.07	63.16	NM	NA	3380.91
MW069	03/18/2008	3444.07	63.17	NM	NA	3380.90
MW069	08/04/2008	3444.07	63.10	NM	NA	3380.97
MW069	03/10/2009	3444.07	62.99	NM	NA	3381.08
MW069	03/22/2009	3444.07	63.39	NM	NA	3380.68
MW069	07/28/2009	3444.07	63.09	NM	NA	3380.98
MW069	03/01/2010	3444.07	63.17	NM	NA	3380.90
MW069	08/02/2010	3444.07	63.20	NM	NA	3380.87
MW069	05/04/2011	3444.07	63.82	NM	NA	3380.25
MW069	11/01/2011	3444.07	62.95	NM	NA	3381.12
MW069	05/01/2012	3444.07	63.04	NM	NA	3381.03
MW069	05/01/2013	3444.07	63.21	NM	NA	3380.86
MW069	10/28/2013	3444.07	63.16	NM	NA	3380.91
MW069	05/05/2014	3444.07	63.26	NM	NA	3380.81
MW069	11/03/2014	3444.07	63.31	NM	NA	3380.76
MW069	05/06/2015	3444.07	63.10	NM	NA	3380.97
MW069	11/03/2015	3444.07	63.00	NM	NA	3381.07
MW069	05/09/2016	3444.07	62.97	NM	NA	3381.10
MW069	09/22/2016	3444.07	63.12	NM	NA	3380.95
MW069	05/02/2017	3445.21	62.82	NM	NA	3382.39
MW069	09/18/2017	3444.07	62.81	NM	NA	3381.26
MW069	03/20/2018	3444.07	62.66	NM	NA	3381.41
MW069	09/13/2018	3444.07	62.54	NM	NA	3381.53
MW069	04/10/2019	3444.07	62.45	NM	NA	3381.62
MW069	10/07/2019	3444.07	62.56	NM	NA	3381.51
MW070	03/27/2003	3439.68	61.00	NM	NA	3378.68
MW070	05/19/2003	3439.68	61.03	NM	NA	3378.65
MW070	09/09/2003	3439.68	61.02	NM	NA	3378.66
MW070	12/02/2003	3439.68	60.93	NM	NA	3378.75
MW070	03/30/2004	3439.68	61.02	NM	NA	3378.66
MW070	06/07/2004	3439.68	60.94	NM	NA	3378.74
MW070	09/16/2004	3439.68	60.90	NM	NA	3378.78
MW070	11/29/2004	3439.68	60.91	NM	NA	3378.77

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW070	03/31/2005	3439.68	60.72	NM	NA	3378.96
MW070	05/23/2005	3439.68	60.52	NM	NA	3379.16
MW070	01/17/2006	3439.68	60.20	NM	NA	3379.48
MW070	06/14/2006	3439.68	59.88	NM	NA	3379.80
MW070	03/29/2007	3439.68	59.47	NM	NA	3380.21
MW070	09/10/2007	3439.68	59.25	NM	NA	3380.43
MW070	03/18/2008	3439.68	59.18	NM	NA	3380.50
MW070	08/04/2008	3439.68	59.09	NM	NA	3380.59
MW070	03/10/2009	3439.68	59.11	NM	NA	3380.57
MW070	07/28/2009	3439.68	59.10	NM	NA	3380.58
MW070	03/01/2010	3439.68	59.15	NM	NA	3380.53
MW070	08/02/2010	3439.68	59.13	NM	NA	3380.55
MW070	05/04/2011	3439.68	59.06	NM	NA	3380.62
MW070	11/01/2011	3439.68	59.09	NM	NA	3380.59
MW070	05/01/2012	3439.68	59.00	NM	NA	3380.68
MW070	10/24/2012	3439.68	59.02	NM	NA	3380.66
MW070	05/01/2013	3439.68	59.28	NM	NA	3380.40
MW070	10/28/2013	3439.68	59.24	NM	NA	3380.44
MW070	05/05/2014	3439.68	59.29	NM	NA	3380.39
MW070	11/03/2014	3439.68	59.36	NM	NA	3380.32
MW070	05/06/2015	3439.68	59.14	NM	NA	3380.54
MW070	11/03/2015	3439.68	59.08	NM	NA	3380.60
MW070	05/10/2016	3439.68	58.99	NM	NA	3380.69
MW070	09/22/2016	3439.68	58.94	NM	NA	3380.74
MW070	05/02/2017	3439.68	58.81	NM	NA	3380.87
MW070	09/18/2017	3439.68	58.72	NM	NA	3380.96
MW070	03/20/2018	3439.68	58.63	NM	NA	3381.05
MW070	09/12/2018	3439.68	58.57	NM	NA	3381.11
MW070	04/10/2019	3439.68	58.39	NM	NA	3381.29
MW070	10/07/2019	3439.68	58.46	NM	NA	3381.22
MW070A	03/27/2003	3439.67	61.08	NM	NA	3378.59
MW070A	05/19/2003	3439.67	61.06	NM	NA	3378.61
MW070A	09/09/2003	3439.67	61.05	NM	NA	3378.62
MW070A	12/02/2003	3439.67	60.96	NM	NA	3378.71
MW070A	03/30/2004	3439.67	60.96	NM	NA	3378.71
MW070A	06/07/2004	3439.67	60.98	NM	NA	3378.69
MW070A	09/16/2004	3439.67	60.98	NM	NA	3378.69
MW070A	11/30/2004	3439.67	60.88	NM	NA	3378.79
MW070A	03/31/2005	3439.67	60.68	NM	NA	3378.99
MW070A	05/23/2005	3439.67	60.49	NM	NA	3379.18
MW070A	01/17/2006	3439.67	60.14	NM	NA	3379.53
MW070A	06/14/2006	3439.67	59.92	NM	NA	3379.75
MW070A	03/29/2007	3439.67	59.45	NM	NA	3380.22
MW070A	09/11/2007	3439.67	59.30	NM	NA	3380.37
MW070A	03/18/2008	3439.67	59.09	NM	NA	3380.58
MW070A	08/04/2008	3439.67	59.06	NM	NA	3380.61
MW070A	03/10/2009	3439.67	59.11	NM	NA	3380.56
MW070A	07/28/2009	3439.67	59.14	NM	NA	3380.53
MW070A	03/01/2010	3439.67	59.18	NM	NA	3380.49
MW070A	08/02/2010	3439.67	59.21	NM	NA	3380.46
MW070A	05/03/2011	3439.67	59.06	NM	NA	3380.61
MW070A	11/02/2011	3439.67	59.05	NM	NA	3380.62
MW070A	05/01/2012	3439.67	59.02	NM	NA	3380.65
MW070A	10/24/2012	3439.67	59.05	NM	NA	3380.62
MW070A	05/01/2013	3439.67	59.28	NM	NA	3380.39
MW070A	10/28/2013	3439.67	59.31	NM	NA	3380.36
MW070A	05/05/2014	3439.67	59.32	NM	NA	3380.35
MW070A	11/03/2014	3439.67	59.35	NM	NA	3380.32
MW070A	05/06/2015	3439.67	59.18	NM	NA	3380.49
MW070A	09/16/2015	3439.67	58.96	NM	NA	3380.71
MW070A	11/03/2015	3439.67	59.08	NM	NA	3380.59
MW070A	05/10/2016	3439.67	58.99	NM	NA	3380.68
MW070A	05/02/2017	3439.67	58.81	NM	NA	3380.86
MW071SA	05/02/2003	3401.01	34.79	NM	NA	3366.22
MW071SA	05/19/2003	3401.01	52.61	NM	NA	3348.40
MW071SA	09/08/2003	3401.01	52.83	NM	NA	3348.18
MW071SA	12/02/2003	3401.01	52.98	NM	NA	3348.03
MW071SA	03/30/2004	3401.01	53.03	NM	NA	3347.98
MW071SA	06/07/2004	3401.01	52.78	NM	NA	3348.23
MW071SA	09/14/2004	3401.01	53.00	NM	NA	3348.01

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW071SA	11/29/2004	3401.01	53.71	NM	NA	3347.30
MW071SA	03/31/2005	3401.01	57.12	NM	NA	3343.89
MW071SA	05/23/2005	3401.01	51.90	NM	NA	3349.11
MW071SA	01/17/2006	3401.01	51.25	NM	NA	3349.76
MW071SA	06/15/2006	3401.01	50.95	NM	NA	3350.06
MW071SA	04/03/2007	3401.01	50.47	NM	NA	3350.54
MW071SA	09/18/2007	3401.01	49.94	NM	NA	3351.07
MW071SA	03/18/2008	3401.01	49.73	NM	NA	3351.28
MW071SA	08/04/2008	3401.01	49.87	NM	NA	3351.14
MW071SA	03/10/2009	3401.01	49.92	NM	NA	3351.09
MW071SA	07/28/2009	3401.01	49.83	NM	NA	3351.18
MW071SA	03/01/2010	3401.01	49.91	NM	NA	3351.10
MW071SA	07/30/2010	3401.01	49.89	NM	NA	3351.12
MW071SA	05/04/2011	3401.01	50.10	NM	NA	3350.91
MW071SA	11/03/2011	3401.01	51.41	NM	NA	3349.60
MW071SA	05/01/2012	3401.01	50.36	NM	NA	3350.65
MW071SA	10/23/2012	3401.01	50.31	NM	NA	3350.70
MW071SA	04/29/2013	3401.01	50.21	NM	NA	3350.80
MW071SA	10/28/2013	3401.01	50.40	NM	NA	3350.61
MW071SA	05/05/2014	3401.01	50.00	NM	NA	3351.01
MW071SA	11/03/2014	3401.01	50.05	NM	NA	3350.96
MW071SA	05/05/2015	3401.01	49.42	NM	NA	3351.59
MW071SA	11/02/2015	3401.01	49.50	NM	NA	3351.51
MW071SA	05/11/2016	3401.01	48.82	NM	NA	3352.19
MW071SA	09/14/2016	3401.01	48.92	NM	NA	3352.09
MW071SA	05/01/2017	3401.01	48.26	NM	NA	3352.75
MW071SA	09/14/2017	3401.01	48.18	NM	NA	3352.83
MW071SA	03/20/2018	3401.01	47.94	NM	NA	3353.07
MW071SA	09/12/2018	3401.01	48.19	NM	NA	3352.82
MW071SA	04/09/2019	3401.01	46.98	NM	NA	3354.03
MW071SA	10/07/2019	3401.01	47.17	NM	NA	3353.84
MW072SA	05/01/2003	3401.34	53.46	NM	NA	3347.88
MW072SA	05/19/2003	3401.34	52.96	NM	NA	3348.38
MW072SA	09/08/2003	3401.34	53.24	NM	NA	3348.10
MW072SA	12/02/2003	3401.34	53.35	NM	NA	3347.99
MW072SA	03/30/2004	3401.34	53.49	NM	NA	3347.85
MW072SA	06/07/2004	3401.34	53.18	NM	NA	3348.16
MW072SA	09/14/2004	3401.34	53.39	NM	NA	3347.95
MW072SA	11/29/2004	3401.34	53.06	NM	NA	3348.28
MW072SA	03/29/2005	3401.34	52.39	NM	NA	3348.95
MW072SA	05/23/2005	3401.34	52.14	NM	NA	3349.20
MW072SA	01/17/2006	3401.34	51.49	NM	NA	3349.85
MW072SA	06/15/2006	3401.34	51.25	NM	NA	3350.09
MW072SA	04/03/2007	3401.34	50.78	NM	NA	3350.56
MW072SA	09/13/2007	3401.34	50.20	NM	NA	3351.14
MW072SA	03/18/2008	3401.34	50.06	NM	NA	3351.28
MW072SA	08/04/2008	3401.34	50.29	NM	NA	3351.05
MW072SA	03/10/2009	3401.34	50.44	NM	NA	3350.90
MW072SA	07/28/2009	3401.34	50.24	NM	NA	3351.10
MW072SA	03/01/2010	3401.34	50.37	NM	NA	3350.97
MW072SA	07/30/2010	3401.34	50.40	NM	NA	3350.94
MW072SA	05/04/2011	3401.34	50.68	NM	NA	3350.66
MW072SA	11/02/2011	3401.34	51.08	NM	NA	3350.26
MW072SA	05/02/2012	3401.34	50.91	NM	NA	3350.43
MW072SA	10/23/2012	3401.34	50.88	NM	NA	3350.46
MW072SA	04/29/2013	3401.34	50.90	NM	NA	3350.44
MW072SA	10/29/2013	3401.34	51.05	NM	NA	3350.29
MW072SA	05/05/2014	3401.34	50.55	NM	NA	3350.79
MW072SA	11/03/2014	3401.34	50.65	NM	NA	3350.69
MW072SA	05/05/2015	3401.34	49.86	NM	NA	3351.48
MW072SA	11/02/2015	3401.34	50.01	NM	NA	3351.33
MW072SA	05/10/2016	3401.34	49.18	NM	NA	3352.16
MW072SA	09/15/2016	3401.34	49.30	NM	NA	3352.04
MW072SA	05/01/2017	3401.34	48.73	NM	NA	3352.61
MW072SA	09/14/2017	3401.34	48.68	NM	NA	3352.66
MW072SA	03/20/2018	3401.34	48.24	NM	NA	3353.10
MW072SA	09/12/2018	3401.34	48.76	NM	NA	3352.58
MW072SA	04/09/2019	3401.34	47.08	NM	NA	3354.26
MW072SA	10/07/2019	3401.34	47.51	NM	NA	3353.83
MW073SA	05/03/2003	3403.26	50.25	NM	NA	3353.01

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW073SA	05/19/2003	3403.26	50.21	NM	NA	3353.05
MW073SA	09/08/2003	3403.26	50.61	NM	NA	3352.65
MW073SA	12/02/2003	3403.26	50.74	NM	NA	3352.52
MW073SA	03/30/2004	3403.26	50.86	NM	NA	3352.40
MW073SA	06/07/2004	3403.26	50.58	NM	NA	3352.68
MW073SA	09/14/2004	3403.26	50.76	NM	NA	3352.50
MW073SA	11/29/2004	3403.26	50.40	NM	NA	3352.86
MW073SA	03/31/2005	3403.26	49.65	NM	NA	3353.61
MW073SA	05/23/2005	3403.26	49.38	NM	NA	3353.88
MW073SA	01/17/2006	3403.26	48.68	NM	NA	3354.58
MW073SA	06/15/2006	3403.26	48.52	NM	NA	3354.74
MW073SA	04/03/2007	3403.26	48.01	NM	NA	3355.25
MW073SA	09/12/2007	3403.26	47.55	NM	NA	3355.71
MW073SA	03/18/2008	3403.26	47.45	NM	NA	3355.81
MW073SA	08/04/2008	3403.26	47.78	NM	NA	3355.48
MW073SA	03/10/2009	3403.26	47.89	NM	NA	3355.37
MW073SA	07/28/2009	3403.26	47.97	NM	NA	3355.29
MW073SA	03/01/2010	3403.26	48.08	NM	NA	3355.18
MW073SA	07/30/2010	3403.26	48.07	NM	NA	3355.19
MW073SA	11/03/2011	3403.26	48.84	NM	NA	3354.42
MW073SA	05/02/2012	3403.26	48.65	NM	NA	3354.61
MW073SA	10/23/2012	3403.26	48.76	NM	NA	3354.50
MW073SA	04/29/2013	3403.26	48.61	NM	NA	3354.65
MW073SA	10/29/2013	3403.26	49.06	NM	NA	3354.20
MW073SA	05/05/2014	3403.26	48.44	NM	NA	3354.82
MW073SA	11/03/2014	3403.26	48.58	NM	NA	3354.68
MW073SA	05/05/2015	3403.26	47.72	NM	NA	3355.54
MW073SA	11/02/2015	3403.26	47.82	NM	NA	3355.44
MW073SA	05/10/2016	3403.26	47.03	NM	NA	3356.23
MW073SA	09/15/2016	3403.26	47.36	NM	NA	3355.90
MW073SA	05/01/2017	3403.26	46.26	NM	NA	3357.00
MW073SA	09/14/2017	3403.26	46.21	NM	NA	3357.05
MW073SA	03/20/2018	3403.26	45.43	NM	NA	3357.83
MW073SA	09/12/2018	3403.26	45.96	NM	NA	3357.30
MW073SA	04/09/2019	3403.26	43.16	NM	NA	3360.10
MW073SA	10/07/2019	3403.26	45.22	NM	NA	3358.04
MW074SA	02/18/2004	3409.97	50.22	NM	NA	3359.75
MW074SA	03/30/2004	3409.97	50.24	NM	NA	3359.73
MW074SA	06/07/2004	3409.97	50.15	NM	NA	3359.82
MW074SA	09/14/2004	3409.97	50.22	NM	NA	3359.75
MW074SA	03/31/2005	3409.97	49.79	NM	NA	3360.18
MW074SA	05/23/2005	3409.97	49.69	NM	NA	3360.28
MW074SA	01/17/2006	3409.97	49.31	NM	NA	3360.66
MW074SA	06/15/2006	3409.97	49.02	NM	NA	3360.95
MW074SA	04/03/2007	3409.97	48.39	NM	NA	3361.58
MW074SA	09/05/2007	3409.97	48.10	NM	NA	3361.87
MW074SA	03/18/2008	3409.97	48.03	NM	NA	3361.94
MW074SA	08/04/2008	3409.97	48.07	NM	NA	3361.9
MW074SA	03/10/2009	3409.97	48.18	NM	NA	3361.79
MW074SA	07/28/2009	3409.97	48.14	NM	NA	3361.83
MW074SA	03/01/2010	3409.97	48.14	NM	NA	3361.83
MW074SA	07/30/2010	3409.97	48.19	NM	NA	3361.78
MW074SA	05/04/2011	3409.97	48.21	NM	NA	3361.76
MW074SA	11/02/2011	3409.97	48.50	NM	NA	3361.47
MW074SA	05/02/2012	3409.97	48.50	NM	NA	3361.47
MW074SA	10/23/2012	3409.97	48.72	NM	NA	3361.25
MW074SA	04/29/2013	3409.97	48.78	NM	NA	3361.19
MW074SA	10/28/2013	3409.97	49.02	NM	NA	3360.95
MW074SA	05/05/2014	3409.97	48.85	NM	NA	3361.12
MW074SA	11/03/2014	3409.97	48.92	NM	NA	3361.05
MW074SA	05/05/2015	3409.97	48.44	NM	NA	3361.53
MW074SA	11/02/2015	3409.97	48.38	NM	NA	3361.59
MW074SA	05/11/2016	3409.97	48.14	NM	NA	3361.83
MW074SA	09/15/2016	3409.97	48.10	NM	NA	3361.87
MW074SA	05/01/2017	3409.97	47.49	NM	NA	3362.48
MW074SA	09/14/2017	3409.97	47.41	NM	NA	3362.56
MW074SA	03/20/2018	3409.97	47.26	NM	NA	3362.71
MW074SA	09/12/2018	3409.97	47.40	NM	NA	3362.57
MW074SA	04/09/2019	3409.97	46.95	NM	NA	3363.02
MW074SA	10/07/2019	3409.97	46.94	NM	NA	3363.03

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW075SA	02/18/2004	3404.21	54.19	NM	NA	3350.02
MW075SA	03/30/2004	3404.21	54.21	NM	NA	3350.00
MW075SA	06/07/2004	3404.21	54.11	NM	NA	3350.10
MW075SA	09/14/2004	3404.21	54.08	NM	NA	3350.13
MW075SA	11/29/2004	3404.21	54.04	NM	NA	3350.17
MW075SA	03/31/2005	3404.21	53.69	NM	NA	3350.52
MW075SA	05/23/2005	3404.21	53.49	NM	NA	3350.72
MW075SA	01/17/2006	3404.21	52.89	NM	NA	3351.32
MW075SA	06/15/2006	3404.21	52.44	NM	NA	3351.77
MW075SA	04/03/2007	3404.21	51.86	NM	NA	3352.35
MW075SA	09/05/2007	3404.21	51.38	NM	NA	3352.83
MW075SA	03/18/2008	3404.21	51.07	NM	NA	3353.14
MW075SA	08/04/2008	3404.21	50.91	NM	NA	3353.30
MW075SA	03/10/2009	3404.21	50.93	NM	NA	3353.28
MW075SA	07/28/2009	3404.21	50.80	NM	NA	3353.41
MW075SA	03/01/2010	3404.21	50.81	NM	NA	3353.40
MW075SA	07/30/2010	3404.21	50.71	NM	NA	3353.50
MW075SA	05/04/2011	3404.21	50.85	NM	NA	3353.36
MW075SA	11/02/2011	3404.21	51.00	NM	NA	3353.21
MW075SA	05/01/2012	3404.21	51.03	NM	NA	3353.18
MW075SA	10/23/2012	3404.21	51.01	NM	NA	3353.20
MW075SA	04/29/2013	3404.21	50.98	NM	NA	3353.23
MW075SA	10/28/2013	3404.21	51.10	NM	NA	3353.11
MW075SA	05/05/2014	3404.21	50.91	NM	NA	3353.30
MW075SA	11/03/2014	3404.21	50.93	NM	NA	3353.28
MW075SA	05/05/2015	3404.21	50.58	NM	NA	3353.63
MW075SA	11/02/2015	3404.21	50.45	NM	NA	3353.76
MW075SA	05/11/2016	3404.21	50.05	NM	NA	3354.16
MW075SA	09/14/2016	3404.21	50.00	NM	NA	3354.21
MW075SA	05/01/2017	3404.21	49.47	NM	NA	3354.74
MW075SA	09/14/2017	3404.21	49.24	NM	NA	3354.97
MW075SA	03/20/2018	3404.21	49.12	NM	NA	3355.09
MW075SA	09/11/2018	3404.21	49.03	NM	NA	3355.18
MW075SA	04/09/2019	3404.21	48.55	NM	NA	3355.66
MW075SA	10/07/2019	3404.21	48.43	NM	NA	3355.78
MW076SA	02/18/2004	3404.13	55.72	NM	NA	3348.41
MW076SA	03/29/2004	3404.13	55.77	NM	NA	3348.36
MW076SA	06/07/2004	3404.13	55.62	NM	NA	3348.51
MW076SA	09/14/2004	3404.13	55.64	NM	NA	3348.49
MW076SA	11/29/2004	3404.13	55.54	NM	NA	3348.59
MW076SA	03/31/2005	3404.13	55.17	NM	NA	3348.96
MW076SA	05/23/2005	3404.13	54.94	NM	NA	3349.19
MW076SA	01/17/2006	3404.13	54.39	NM	NA	3349.74
MW076SA	06/15/2006	3404.13	53.95	NM	NA	3350.18
MW076SA	04/03/2007	3404.13	53.01	NM	NA	3351.12
MW076SA	03/18/2008	3404.13	52.76	NM	NA	3351.37
MW076SA	08/04/2008	3404.13	52.60	NM	NA	3351.53
MW076SA	03/10/2009	3404.13	52.61	NM	NA	3351.52
MW076SA	07/28/2009	3404.13	52.45	NM	NA	3351.68
MW076SA	03/01/2010	3404.13	52.79	NM	NA	3351.34
MW076SA	07/30/2010	3404.13	52.40	NM	NA	3351.73
MW076SA	05/04/2011	3404.13	52.54	NM	NA	3351.59
MW076SA	11/02/2011	3404.13	52.72	NM	NA	3351.41
MW076SA	05/01/2012	3404.13	52.73	NM	NA	3351.40
MW076SA	10/23/2012	3404.13	52.65	NM	NA	3351.48
MW076SA	04/29/2013	3404.13	52.60	NM	NA	3351.53
MW076SA	10/28/2013	3404.13	52.76	NM	NA	3351.37
MW076SA	05/05/2014	3404.13	52.50	NM	NA	3351.63
MW076SA	11/03/2014	3404.13	52.48	NM	NA	3351.65
MW076SA	05/05/2015	3404.13	52.13	NM	NA	3352.00
MW076SA	11/02/2015	3404.13	52.00	NM	NA	3352.13
MW076SA	05/11/2016	3404.13	50.55	NM	NA	3353.58
MW076SA	09/14/2016	3404.13	51.58	NM	NA	3352.55
MW076SA	05/01/2017	3404.13	51.10	NM	NA	3353.03
MW076SA	09/14/2017	3404.13	50.86	NM	NA	3353.27
MW076SA	03/20/2018	3404.13	50.76	NM	NA	3353.37
MW076SA	09/11/2018	3404.13	50.69	NM	NA	3353.44
MW076SA	04/09/2019	3404.13	50.11	NM	NA	3354.02
MW076SA	10/07/2019	3404.13	50.04	NM	NA	3354.09
MW077SA	02/18/2004	3401.71	53.71	NM	NA	3348.00

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW077SA	03/30/2004	3401.71	53.72	NM	NA	3347.99
MW077SA	06/07/2004	3401.71	53.49	NM	NA	3348.22
MW077SA	09/14/2004	3401.71	53.56	NM	NA	3348.15
MW077SA	03/31/2005	3401.71	52.99	NM	NA	3348.72
MW077SA	05/23/2005	3401.71	52.77	NM	NA	3348.94
MW077SA	01/17/2006	3401.71	57.13	NM	NA	3344.58
MW077SA	06/15/2006	3401.71	51.79	NM	NA	3349.92
MW077SA	04/11/2007	3401.71	51.34	NM	NA	3350.37
MW077SA	09/06/2007	3401.71	50.82	NM	NA	3350.89
MW077SA	03/19/2008	3401.71	50.62	NM	NA	3351.09
MW077SA	08/04/2008	3401.71	50.56	NM	NA	3351.15
MW077SA	03/11/2009	3401.71	50.71	NM	NA	3351.00
MW077SA	07/29/2009	3401.71	50.49	NM	NA	3351.22
MW077SA	03/01/2010	3401.71	50.53	NM	NA	3351.18
MW077SA	07/30/2010	3401.71	50.46	NM	NA	3351.25
MW077SA	05/04/2011	3401.71	50.63	NM	NA	3351.08
MW077SA	11/02/2011	3401.71	50.90	NM	NA	3350.81
MW077SA	05/01/2012	3401.71	50.89	NM	NA	3350.82
MW077SA	10/23/2012	3401.71	50.80	NM	NA	3350.91
MW077SA	04/29/2013	3401.71	50.74	NM	NA	3350.97
MW078SA	03/30/2004	3411.12	44.63	NM	NA	3366.49
MW078SA	06/07/2004	3411.12	45.45	NM	NA	3365.67
MW078SA	09/16/2004	3411.12	45.72	NM	NA	3365.40
MW078SA	11/29/2004	3411.12	45.18	NM	NA	3365.94
MW078SA	03/31/2005	3411.12	44.30	NM	NA	3366.82
MW078SA	05/23/2005	3411.12	44.08	NM	NA	3367.04
MW078SA	01/17/2006	3411.12	43.64	NM	NA	3367.48
MW078SA	06/16/2006	3411.12	43.97	NM	NA	3367.15
MW078SA	04/05/2007	3411.12	43.42	NM	NA	3367.70
MW078SA	09/06/2007	3411.12	43.47	NM	NA	3367.65
MW078SA	03/18/2008	3411.12	43.49	NM	NA	3367.63
MW078SA	08/04/2008	3411.12	44.70	NM	NA	3366.42
MW078SA	03/10/2009	3411.12	43.47	NM	NA	3367.65
MW078SA	07/28/2009	3411.12	44.50	NM	NA	3366.62
MW078SA	03/01/2010	3411.12	44.34	NM	NA	3366.78
MW078SA	07/30/2010	3411.12	44.40	NM	NA	3366.72
MW078SA	05/05/2011	3411.12	44.55	NM	NA	3366.57
MW078SA	11/03/2011	3411.12	45.06	NM	NA	3366.06
MW078SA	05/02/2012	3411.12	44.85	NM	NA	3366.27
MW078SA	10/23/2012	3411.12	45.18	NM	NA	3365.94
MW078SA	04/29/2013	3411.12	44.98	NM	NA	3366.14
MW078SA	10/29/2013	3411.12	45.45	NM	NA	3365.67
MW078SA	05/05/2014	3411.12	45.00	NM	NA	3366.12
MW078SA	11/03/2014	3411.12	45.13	NM	NA	3365.99
MW078SA	05/05/2015	3411.12	44.32	NM	NA	3366.80
MW078SA	11/03/2015	3411.12	44.52	NM	NA	3366.60
MW078SA	04/10/2019	3411.12	38.94	NM	NA	3372.18
MW079SA	03/30/2004	3408.8	48.78	NM	NA	3360.02
MW079SA	06/07/2004	3408.8	46.61	NM	NA	3362.19
MW079SA	09/14/2004	3408.8	48.73	NM	NA	3360.07
MW079SA	11/29/2004	3408.8	46.27	NM	NA	3362.53
MW079SA	05/15/2005	3408.8	46.52	NM	NA	3362.28
MW079SA	05/23/2005	3408.8	47.09	NM	NA	3361.71
MW079SA	01/17/2006	3408.8	46.31	NM	NA	3362.49
MW079SA	06/16/2006	3408.8	46.33	NM	NA	3362.47
MW079SA	03/28/2007	3408.8	45.81	NM	NA	3362.99
MW079SA	09/06/2007	3408.8	45.68	NM	NA	3363.12
MW079SA	03/21/2008	3408.8	45.54	NM	NA	3363.26
MW079SA	08/04/2008	3408.8	46.31	NM	NA	3362.49
MW079SA	03/11/2009	3408.8	46.03	NM	NA	3362.77
MW079SA	07/29/2009	3408.8	46.55	NM	NA	3362.25
MW079SA	03/01/2010	3408.8	46.61	NM	NA	3362.19
MW079SA	08/03/2010	3408.8	46.58	NM	NA	3362.22
MW079SA	05/05/2011	3408.8	46.74	NM	NA	3362.06
MW079SA	11/03/2011	3408.8	47.43	NM	NA	3361.37
MW079SA	05/02/2012	3408.8	47.15	NM	NA	3361.65
MW079SA	10/23/2012	3408.8	47.53	NM	NA	3361.27
MW079SA	04/29/2013	3408.8	47.25	NM	NA	3361.55
MW079SA	10/29/2013	3408.8	47.87	NM	NA	3360.93
MW079SA	05/05/2014	3408.8	47.25	NM	NA	3361.55

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW079SA	11/03/2014	3408.8	47.51	NM	NA	3361.29
MW079SA	11/03/2015	3408.8	46.71	NM	NA	3362.09
MW079SA	05/10/2016	3408.8	45.88	NM	NA	3362.92
MW079SA	09/22/2016	3408.8	46.35	NM	NA	3362.45
MW079SA	05/02/2017	3408.8	45.06	NM	NA	3363.74
MW079SA	09/14/2017	3408.8	45.24	NM	NA	3363.56
MW079SA	03/20/2018	3408.8	44.47	NM	NA	3364.33
MW079SA	09/12/2018	3408.8	44.97	NM	NA	3363.83
MW079SA	04/09/2019	3408.80	43.43	NM	NA	3365.37
MW079SA	10/07/2019	3408.80	44.61	NM	NA	3364.19
MW080SA	03/30/2004	3408.92	48.82	NM	NA	3360.10
MW080SA	06/07/2004	3408.92	48.70	NM	NA	3360.22
MW080SA	09/14/2004	3408.92	48.81	NM	NA	3360.11
MW080SA	11/29/2004	3408.92	48.36	NM	NA	3360.56
MW080SA	03/16/2005	3408.92	47.56	NM	NA	3361.36
MW080SA	05/23/2005	3408.92	48.18	NM	NA	3360.74
MW080SA	01/17/2006	3408.92	46.42	NM	NA	3362.50
MW080SA	06/16/2006	3408.92	46.46	NM	NA	3362.46
MW080SA	03/28/2007	3408.92	45.85	NM	NA	3363.07
MW080SA	09/06/2007	3408.92	45.80	NM	NA	3363.12
MW080SA	03/21/2008	3408.92	45.70	NM	NA	3363.22
MW080SA	08/04/2008	3408.92	46.45	NM	NA	3362.47
MW080SA	03/11/2009	3408.92	45.70	NM	NA	3363.22
MW080SA	07/29/2009	3408.92	46.66	NM	NA	3362.26
MW080SA	03/01/2010	3408.92	46.62	NM	NA	3362.30
MW080SA	08/03/2010	3408.92	46.74	NM	NA	3362.18
MW080SA	05/05/2011	3408.92	46.84	NM	NA	3362.08
MW080SA	11/03/2011	3408.92	47.52	NM	NA	3361.40
MW080SA	05/02/2012	3408.92	47.25	NM	NA	3361.67
MW080SA	10/23/2012	3408.92	47.61	NM	NA	3361.31
MW080SA	04/29/2013	3408.92	47.32	NM	NA	3361.60
MW081SA	03/30/2004	3408.28	48.50	NM	NA	3359.78
MW081SA	06/07/2004	3408.28	46.80	NM	NA	3361.48
MW081SA	09/14/2004	3408.28	48.43	NM	NA	3359.85
MW081SA	11/29/2004	3408.28	47.99	NM	NA	3360.29
MW081SA	03/16/2005	3408.28	47.17	NM	NA	3361.11
MW081SA	05/23/2005	3408.28	47.12	NM	NA	3361.16
MW081SA	01/17/2006	3408.28	46.02	NM	NA	3362.26
MW081SA	06/16/2006	3408.28	46.02	NM	NA	3362.26
MW081SA	03/28/2007	3408.28	45.42	NM	NA	3362.86
MW081SA	09/06/2007	3408.28	45.34	NM	NA	3362.94
MW081SA	03/21/2008	3408.28	45.21	NM	NA	3363.07
MW081SA	08/04/2008	3408.28	45.98	NM	NA	3362.30
MW081SA	03/11/2009	3408.28	46.14	NM	NA	3362.14
MW081SA	07/29/2009	3408.28	46.23	NM	NA	3362.05
MW081SA	03/01/2010	3408.28	46.80	NM	NA	3361.48
MW081SA	08/03/2010	3408.28	46.62	NM	NA	3361.66
MW081SA	05/05/2011	3408.28	46.41	NM	NA	3361.87
MW081SA	11/03/2011	3408.28	47.13	NM	NA	3361.15
MW081SA	05/02/2012	3408.28	46.82	NM	NA	3361.46
MW081SA	10/23/2012	3408.28	47.21	NM	NA	3361.07
MW081SA	04/29/2013	3408.28	46.91	NM	NA	3361.37
MW082SA	03/30/2004	3406.25	55.46	NM	NA	3350.79
MW082SA	06/07/2004	3406.25	55.35	NM	NA	3350.90
MW082SA	09/14/2004	3406.25	55.22	NM	NA	3351.03
MW082SA	11/29/2004	3406.25	55.19	NM	NA	3351.06
MW082SA	03/01/2005	3406.25	54.81	NM	NA	3351.44
MW082SA	05/23/2005	3406.25	54.66	NM	NA	3351.59
MW082SA	01/17/2006	3406.25	54.00	NM	NA	3352.25
MW082SA	06/14/2006	3406.25	53.61	NM	NA	3352.64
MW082SA	03/22/2007	3406.25	52.94	NM	NA	3353.31
MW082SA	09/05/2007	3406.25	52.43	NM	NA	3353.82
MW082SA	03/19/2008	3406.25	52.12	NM	NA	3354.13
MW082SA	08/04/2008	3406.25	52.03	NM	NA	3354.22
MW082SA	03/11/2009	3406.25	52.09	NM	NA	3354.16
MW082SA	07/29/2009	3406.25	51.97	NM	NA	3354.28
MW082SA	03/01/2010	3406.25	51.97	NM	NA	3354.28
MW082SA	07/30/2010	3406.25	51.91	NM	NA	3354.34
MW082SA	05/04/2011	3406.25	52.03	NM	NA	3354.22
MW082SA	11/02/2011	3406.25	52.25	NM	NA	3354.00

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW082SA	05/02/2012	3406.25	52.27	NM	NA	3353.98
MW082SA	10/23/2012	3406.25	52.30	NM	NA	3353.95
MW082SA	04/29/2013	3406.25	52.27	NM	NA	3353.98
MW083SA	03/30/2004	3406.11	55.33	NM	NA	3350.78
MW083SA	06/07/2004	3406.11	55.22	NM	NA	3350.89
MW083SA	09/14/2004	3406.11	54.18	NM	NA	3351.93
MW083SA	11/29/2004	3406.11	55.19	NM	NA	3350.92
MW083SA	03/01/2005	3406.11	54.85	NM	NA	3351.26
MW083SA	05/23/2005	3406.11	54.58	NM	NA	3351.53
MW083SA	01/17/2006	3406.11	53.93	NM	NA	3352.18
MW083SA	06/14/2006	3406.11	53.51	NM	NA	3352.60
MW083SA	03/22/2007	3406.11	52.83	NM	NA	3353.28
MW083SA	09/05/2007	3406.11	52.34	NM	NA	3353.77
MW083SA	03/19/2008	3406.11	52.04	NM	NA	3354.07
MW083SA	08/04/2008	3406.11	51.94	NM	NA	3354.17
MW083SA	03/11/2009	3406.11	52.00	NM	NA	3354.11
MW083SA	07/29/2009	3406.11	51.91	NM	NA	3354.20
MW083SA	03/01/2010	3406.11	51.89	NM	NA	3354.22
MW083SA	07/30/2010	3406.11	51.82	NM	NA	3354.29
MW083SA	05/04/2011	3406.11	57.95	NM	NA	3348.16
MW083SA	11/02/2011	3406.11	52.16	NM	NA	3353.95
MW083SA	05/02/2012	3406.11	52.17	NM	NA	3353.94
MW083SA	10/23/2012	3406.11	52.20	NM	NA	3353.91
MW083SA	04/29/2013	3406.11	52.18	NM	NA	3353.93
MW083SA	10/28/2013	3406.11	52.42	NM	NA	3353.69
MW083SA	05/05/2014	3406.11	52.11	NM	NA	3354.00
MW083SA	11/03/2014	3406.11	52.15	NM	NA	3353.96
MW083SA	05/05/2015	3406.11	51.76	NM	NA	3354.35
MW083SA	11/02/2015	3406.11	51.65	NM	NA	3354.46
MW083SA	05/11/2016	3406.11	51.21	NM	NA	3354.90
MW083SA	09/14/2016	3406.11	51.20	NM	NA	3354.91
MW083SA	05/01/2017	3406.11	50.53	NM	NA	3355.58
MW084SA	03/30/2004	3405.98	54.83	NM	NA	3351.15
MW084SA	06/07/2004	3405.98	54.78	NM	NA	3351.20
MW084SA	09/14/2004	3405.98	54.70	NM	NA	3351.28
MW084SA	11/29/2004	3405.98	54.61	NM	NA	3351.37
MW084SA	03/24/2005	3405.98	54.27	NM	NA	3351.71
MW084SA	05/23/2005	3405.98	54.09	NM	NA	3351.89
MW084SA	01/17/2006	3405.98	53.45	NM	NA	3352.53
MW084SA	06/14/2006	3405.98	53.02	NM	NA	3352.96
MW084SA	09/05/2007	3405.98	51.86	NM	NA	3354.12
MW084SA	03/19/2008	3405.98	51.55	NM	NA	3354.43
MW084SA	08/04/2008	3405.98	51.47	NM	NA	3354.51
MW084SA	03/11/2009	3405.98	51.50	NM	NA	3354.48
MW084SA	07/29/2009	3405.98	51.40	NM	NA	3354.58
MW084SA	03/01/2010	3405.98	51.52	NM	NA	3354.46
MW084SA	07/30/2010	3405.98	51.32	NM	NA	3354.66
MW084SA	05/04/2011	3405.98	54.45	NM	NA	3351.53
MW084SA	11/02/2011	3405.98	51.65	NM	NA	3354.33
MW084SA	05/02/2012	3405.98	51.65	NM	NA	3354.33
MW084SA	10/23/2012	3405.98	51.71	NM	NA	3354.27
MW084SA	04/29/2013	3405.98	51.70	NM	NA	3354.28
MW084SA	10/28/2013	3405.98	51.86	NM	NA	3354.12
MW084SA	05/05/2014	3405.98	51.63	NM	NA	3354.35
MW084SA	11/03/2014	3405.98	51.68	NM	NA	3354.30
MW084SA	05/05/2015	3405.98	51.28	NM	NA	3354.70
MW084SA	11/02/2015	3405.98	51.16	NM	NA	3354.82
MW084SA	05/11/2016	3405.98	50.76	NM	NA	3355.22
MW084SA	09/14/2016	3405.98	50.70	NM	NA	3355.28
MW084SA	05/01/2017	3405.98	50.08	NM	NA	3355.90
MW084SA	09/14/2017	3405.98	49.89	NM	NA	3356.09
MW084SA	03/20/2018	3405.98	49.72	NM	NA	3356.26
MW084SA	09/10/2018	3405.98	50.05	NM	NA	3355.93
MW084SA	04/09/2019	3405.98	49.21	NM	NA	3356.77
MW084SA	10/07/2019	3405.98	49.09	NM	NA	3356.89
MW085SA	03/30/2004	3405.98	55.24	NM	NA	3350.74
MW085SA	06/07/2004	3405.98	55.08	NM	NA	3350.90
MW085SA	09/14/2004	3405.98	55.08	NM	NA	3350.90
MW085SA	11/29/2004	3405.98	54.98	NM	NA	3351.00
MW085SA	03/24/2005	3405.98	54.66	NM	NA	3351.32

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW085SA	05/23/2005	3405.98	54.44	NM	NA	3351.54
MW085SA	01/17/2006	3405.98	53.82	NM	NA	3352.16
MW085SA	06/14/2006	3405.98	53.40	NM	NA	3352.58
MW085SA	09/05/2007	3405.98	52.24	NM	NA	3353.74
MW085SA	03/19/2008	3405.98	51.92	NM	NA	3354.06
MW085SA	08/04/2008	3405.98	51.84	NM	NA	3354.14
MW085SA	03/11/2009	3405.98	51.90	NM	NA	3354.08
MW085SA	07/29/2009	3405.98	51.79	NM	NA	3354.19
MW085SA	03/01/2010	3405.98	51.89	NM	NA	3354.09
MW085SA	07/30/2010	3405.98	51.71	NM	NA	3354.27
MW085SA	05/04/2011	3405.98	51.82	NM	NA	3354.16
MW085SA	11/02/2011	3405.98	52.05	NM	NA	3353.93
MW085SA	05/02/2012	3405.98	52.04	NM	NA	3353.94
MW085SA	10/23/2012	3405.98	52.10	NM	NA	3353.88
MW085SA	04/29/2013	3405.98	52.07	NM	NA	3353.91
MW085SA	10/28/2013	3405.98	52.32	NM	NA	3353.66
MW085SA	05/05/2014	3405.98	52.00	NM	NA	3353.98
MW085SA	11/03/2014	3405.98	52.04	NM	NA	3353.94
MW085SA	05/05/2015	3405.98	51.64	NM	NA	3354.34
MW085SA	11/02/2015	3405.98	51.35	NM	NA	3354.63
MW085SA	05/11/2016	3405.98	51.10	NM	NA	3354.88
MW085SA	09/14/2016	3405.98	51.06	NM	NA	3354.92
MW085SA	05/01/2017	3405.98	50.44	NM	NA	3355.54
MW085SA	09/14/2017	3405.98	50.24	NM	NA	3355.74
MW085SA	03/20/2018	3405.98	50.07	NM	NA	3355.91
MW085SA	09/10/2018	3405.98	50.05	NM	NA	3355.93
MW085SA	04/09/2019	3405.98	49.53	NM	NA	3356.45
MW085SA	10/07/2019	3405.98	49.42	NM	NA	3356.56
MW086SA	09/14/2004	3401.86	53.74	NM	NA	3348.12
MW086SA	03/31/2005	3401.86	53.08	NM	NA	3348.78
MW086SA	05/23/2005	3401.86	52.83	NM	NA	3349.03
MW086SA	01/17/2006	3401.86	52.18	NM	NA	3349.68
MW086SA	06/15/2006	3401.86	51.86	NM	NA	3350.00
MW086SA	04/11/2007	3401.86	51.38	NM	NA	3350.48
MW086SA	09/20/2007	3401.86	50.87	NM	NA	3350.99
MW086SA	03/19/2008	3401.86	50.71	NM	NA	3351.15
MW086SA	08/04/2008	3401.86	50.72	NM	NA	3351.14
MW086SA	03/11/2009	3401.86	50.91	NM	NA	3350.95
MW086SA	07/29/2009	3401.86	50.67	NM	NA	3351.19
MW086SA	03/01/2010	3401.86	50.74	NM	NA	3351.12
MW086SA	07/30/2010	3401.86	50.64	NM	NA	3351.22
MW086SA	05/04/2011	3401.86	50.92	NM	NA	3350.94
MW086SA	11/03/2011	3401.86	21.20	NM	NA	3380.66
MW086SA	05/01/2012	3401.86	51.16	NM	NA	3350.70
MW086SA	10/23/2012	3401.86	51.09	NM	NA	3350.77
MW086SA	04/29/2013	3401.86	51.01	NM	NA	3350.85
MW086SA	10/28/2013	3401.86	51.15	NM	NA	3350.71
MW086SA	05/05/2014	3401.86	50.81	NM	NA	3351.05
MW086SA	11/03/2014	3401.86	50.86	NM	NA	3351.00
MW086SA	05/05/2015	3401.86	50.29	NM	NA	3351.57
MW086SA	11/02/2015	3401.86	50.36	NM	NA	3351.50
MW086SA	05/11/2016	3401.86	49.68	NM	NA	3352.18
MW086SA	09/14/2016	3401.86	49.79	NM	NA	3352.07
MW086SA	05/01/2017	3401.86	49.25	NM	NA	3352.61
MW086SA	03/20/2018	3401.86	48.93	NM	NA	3352.93
MW086SA	09/11/2018	3401.86	49.73	NM	NA	3352.13
MW086SA**	09/18/2017	3401.86	66.76	NM	NA	3335.10
MW086SA	04/09/2019	3401.86	48.08	NM	NA	3353.78
MW086SA	10/07/2019	3401.86	48.17	NM	NA	3353.69
MW087A	09/24/2004	3430.75	50.05	NM	NA	3380.70
MW087A	03/31/2005	3430.75	50.85	NM	NA	3379.90
MW087A	05/23/2005	3430.75	50.74	NM	NA	3380.01
MW087A	01/17/2006	3430.75	50.15	NM	NA	3380.60
MW087A	06/19/2006	3430.75	49.95	NM	NA	3380.80
MW087A	04/13/2007	3430.75	49.41	NM	NA	3381.34
MW087A	03/24/2008	3430.75	49.51	NM	NA	3381.24
MW087A	03/11/2009	3430.75	49.84	NM	NA	3380.91
MW087A	03/01/2010	3430.75	50.13	NM	NA	3380.62
MW087A	08/03/2010	3430.75	50.17	NM	NA	3380.58
MW087A	05/04/2011	3430.75	49.94	NM	NA	3380.81

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW087A	11/04/2011	3430.75	49.89	NM	NA	3380.86
MW087A	05/04/2012	3430.75	50.21	NM	NA	3380.54
MW087A	10/23/2012	3430.75	50.42	NM	NA	3380.33
MW087A	05/02/2013	3430.75	50.60	NM	NA	3380.15
MW087A	10/28/2013	3430.75	50.63	NM	NA	3380.12
MW087A	05/05/2014	3430.75	50.68	NM	NA	3380.07
MW087A	11/04/2014	3430.75	50.42	NM	NA	3380.33
MW087A	05/06/2015	3430.75	50.12	NM	NA	3380.63
MW087A	09/16/2015	3430.75	49.86	NM	NA	3380.89
MW087A	11/02/2015	3430.75	50.03	NM	NA	3380.72
MW087A	05/12/2016	3430.75	50.00	NM	NA	3380.75
MW087A	05/03/2017	3430.75	49.37	NM	NA	3381.38
MW087A	03/20/2018	3430.75	49.09	NM	NA	3381.66
MW087A	04/10/2019	3430.75	48.97	NM	NA	3381.78
MW088M	09/24/2004	3430.63	50.65	NM	NA	3379.98
MW088M	03/31/2005	3430.63	50.61	NM	NA	3380.02
MW088M	05/23/2005	3430.63	50.25	NM	NA	3380.38
MW088M	01/16/2006	3430.63	49.90	NM	NA	3380.73
MW088M	06/19/2006	3430.63	49.67	NM	NA	3380.96
MW088M	04/05/2007	3430.63	49.25	NM	NA	3381.38
MW088M	03/21/2008	3430.63	49.00	NM	NA	3381.63
MW088M	03/11/2009	3430.63	49.30	NM	NA	3381.33
MW088M	03/01/2010	3430.63	49.52	NM	NA	3381.11
MW088M	08/03/2010	3430.63	48.77	NM	NA	3381.86
MW088M	05/03/2011	3430.63	49.60	NM	NA	3381.03
MW088M	11/02/2011	3430.27	49.57	NM	NA	3380.70
MW088M	05/03/2012	3430.27	49.72	NM	NA	3380.55
MW088M	10/24/2012	3430.27	49.81	NM	NA	3380.46
MW088M	05/01/2013	3430.27	49.94	NM	NA	3380.33
MW088M	10/29/2013	3430.27	50.01	NM	NA	3380.26
MW088M	05/05/2014	3430.27	50.08	NM	NA	3380.19
MW088M	05/06/2015	3430.27	49.64	NM	NA	3380.63
MW088M	09/16/2015	3430.27	49.41	NM	NA	3380.86
MW088M	11/03/2015	3430.27	49.53	NM	NA	3380.74
MW088M	05/09/2016	3430.27	49.37	NM	NA	3380.90
MW088M	05/02/2017	3430.27	48.92	NM	NA	3381.35
MW088M	09/18/2017	3430.27	48.78	NM	NA	3381.49
MW088M**	03/20/2018	3430.27	43.64	NM	NA	3386.63
MW088M	09/13/2018	3430.27	48.58	NM	NA	3381.69
MW088M	04/10/2019	3430.27	48.34	NM	NA	3381.93
MW088M	10/07/2019	3430.27	48.55	NM	NA	3381.72
MW089SA	01/17/2006	3428.09	48.30	NM	NA	3379.79
MW089SA	06/20/2006	3428.09	48.10	NM	NA	3379.99
MW089SA	04/05/2007	3428.09	47.87	NM	NA	3380.22
MW089SA	03/21/2008	3428.09	47.79	NM	NA	3380.30
MW089SA	03/11/2009	3428.09	48.30	NM	NA	3379.79
MW089SA	03/01/2010	3428.09	48.54	NM	NA	3379.55
MW089SA	08/02/2010	3428.09	48.54	NM	NA	3379.55
MW089SA	05/04/2011	3428.09	48.45	NM	NA	3379.64
MW089SA	11/04/2011	3428.09	48.61	NM	NA	3379.48
MW089SA	05/03/2012	3428.09	48.77	NM	NA	3379.32
MW089SA	10/23/2012	3428.09	48.99	NM	NA	3379.10
MW089SA	05/01/2013	3428.09	49.19	NM	NA	3378.90
MW089SA	10/29/2013	3428.09	49.35	NM	NA	3378.74
MW089SA	05/05/2014	3428.09	49.41	NM	NA	3378.68
MW089SA	11/03/2014	3428.09	48.90	NM	NA	3379.19
MW089SA	05/05/2015	3428.09	48.60	NM	NA	3379.49
MW089SA	11/02/2015	3428.09	48.60	NM	NA	3379.49
MW089SA	05/12/2016	3428.09	48.42	NM	NA	3379.67
MW089SA	09/14/2016	3428.09	48.37	NM	NA	3379.72
MW089SA	05/02/2017	3428.09	47.75	NM	NA	3380.34
MW089SA	09/18/2017	3428.09	47.64	NM	NA	3380.45
MW089SA	03/21/2018	3428.09	47.42	NM	NA	3380.67
MW089SA	09/14/2018	3428.09	47.64	NM	NA	3380.45
MW089SA	04/10/2019	3428.09	47.27	NM	NA	3380.82
MW089SA	10/07/2019	3428.09	47.57	NM	NA	3380.52
MW090SA	01/18/2006	3428.33	48.76	NM	NA	3379.57
MW090SA	06/20/2006	3428.33	48.57	NM	NA	3379.76
MW090SA	04/05/2007	3428.33	48.42	NM	NA	3379.91
MW090SA	03/21/2008	3428.33	48.29	NM	NA	3380.04

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW090SA	03/11/2009	3428.33	48.79	NM	NA	3379.54
MW090SA	07/29/2009	3428.33	48.98	NM	NA	3379.35
MW090SA	03/01/2010	3428.33	49.00	NM	NA	3379.33
MW090SA	08/02/2010	3428.33	49.02	NM	NA	3379.31
MW090SA	05/04/2011	3428.33	48.90	NM	NA	3379.43
MW090SA	11/04/2011	3428.33	49.11	NM	NA	3379.22
MW090SA	05/03/2012	3428.33	49.26	NM	NA	3379.07
MW090SA	10/23/2012	3428.33	49.51	NM	NA	3378.82
MW090SA	05/01/2013	3428.33	49.67	NM	NA	3378.66
MW090SA	10/29/2013	3428.33	49.90	NM	NA	3378.43
MW090SA	05/05/2014	3428.33	49.91	NM	NA	3378.42
MW090SA	11/03/2014	3428.33	49.43	NM	NA	3378.90
MW090SA	05/05/2015	3428.33	49.61	NM	NA	3378.72
MW090SA	11/02/2015	3428.33	49.14	NM	NA	3379.19
MW090SA	05/12/2016	3428.33	48.94	NM	NA	3379.39
MW090SA	09/14/2016	3428.33	48.87	NM	NA	3379.46
MW090SA	05/02/2017	3428.33	48.25	NM	NA	3380.08
MW090SA	03/21/2018	3428.33	47.96	NM	NA	3380.37
MW090SA	04/10/2019	3428.33	47.78	NM	NA	3380.55
MW090SA	10/07/2019	3428.33	48.09	NM	NA	3380.24
MW091SA	01/17/2006	3422.45	43.90	NM	NA	3378.55
MW091SA	06/20/2006	3422.45	43.86	NM	NA	3378.59
MW091SA	04/05/2007	3422.45	43.37	NM	NA	3379.08
MW091SA	03/19/2008	3422.45	43.33	NM	NA	3379.12
MW091SA	03/11/2009	3422.45	43.84	NM	NA	3378.61
MW091SA	03/01/2010	3422.45	43.90	NM	NA	3378.55
MW091SA	08/02/2010	3422.45	43.93	NM	NA	3378.52
MW091SA	05/04/2011	3422.45	43.85	NM	NA	3378.60
MW091SA	11/04/2011	3422.45	44.15	NM	NA	3378.30
MW091SA	05/02/2012	3422.45	44.15	NM	NA	3378.30
MW091SA	10/24/2012	3422.45	44.50	NM	NA	3377.95
MW091SA	04/30/2013	3422.45	44.70	NM	NA	3377.75
MW091SA	10/28/2013	3422.45	45.10	NM	NA	3377.35
MW091SA	05/05/2014	3422.45	45.01	NM	NA	3377.44
MW091SA	11/03/2014	3422.45	44.45	NM	NA	3378.00
MW091SA	05/05/2015	3422.45	44.19	NM	NA	3378.26
MW091SA	11/02/2015	3422.45	44.25	NM	NA	3378.20
MW091SA	05/11/2016	3422.45	44.02	NM	NA	3378.43
MW091SA	09/15/2016	3422.45	43.93	NM	NA	3378.52
MW091SA	05/01/2017	3422.45	43.28	NM	NA	3379.17
MW092SA	01/17/2006	3422.51	43.94	NM	NA	3378.57
MW092SA	06/20/2006	3422.51	43.62	NM	NA	3378.89
MW092SA	04/05/2007	3422.51	43.50	NM	NA	3379.01
MW092SA	03/19/2008	3422.51	43.38	NM	NA	3379.13
MW092SA	03/11/2009	3422.51	43.89	NM	NA	3378.62
MW092SA	03/01/2010	3422.51	43.92	NM	NA	3378.59
MW092SA	08/02/2010	3422.51	43.94	NM	NA	3378.57
MW092SA	05/04/2011	3422.51	43.91	NM	NA	3378.60
MW092SA	11/04/2011	3422.51	44.17	NM	NA	3378.34
MW092SA	05/02/2012	3422.51	44.16	NM	NA	3378.35
MW092SA	10/24/2012	3422.51	44.54	NM	NA	3377.97
MW092SA	04/30/2013	3422.51	44.74	NM	NA	3377.77
MW093SA	01/17/2006	3422.72	44.13	NM	NA	3378.59
MW093SA	06/20/2006	3422.72	43.60	NM	NA	3379.12
MW093SA	04/05/2007	3422.72	43.56	NM	NA	3379.16
MW093SA	03/24/2008	3422.72	43.55	NM	NA	3379.17
MW093SA	03/11/2009	3422.72	44.12	NM	NA	3378.60
MW093SA	03/01/2010	3422.72	44.13	NM	NA	3378.59
MW093SA	08/02/2010	3422.72	44.70	NM	NA	3378.02
MW093SA	05/04/2011	3422.72	44.14	NM	NA	3378.58
MW093SA	11/04/2011	3422.72	44.42	NM	NA	3378.30
MW093SA	05/02/2012	3422.72	44.43	NM	NA	3378.29
MW093SA	10/24/2012	3422.72	44.78	NM	NA	3377.94
MW093SA	04/30/2013	3422.72	45.00	NM	NA	3377.72
MW093SA	10/28/2013	3422.72	45.30	NM	NA	3377.42
MW093SA	05/05/2014	3422.72	45.31	NM	NA	3377.41
MW093SA	11/03/2014	3422.72	44.79	NM	NA	3377.93
MW093SA	05/05/2015	3422.72	44.59	NM	NA	3378.13
MW093SA	11/02/2015	3422.72	44.58	NM	NA	3378.14
MW093SA	05/11/2016	3422.72	44.38	NM	NA	3378.34

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
MW093SA	09/15/2016	3422.72	44.23	NM	NA	3378.49
MW093SA	05/01/2017	3422.72	43.61	NM	NA	3379.11
MW093SA	09/18/2017	3422.72	43.65	NM	NA	3379.07
MW093SA	03/21/2018	3422.72	43.48	NM	NA	3379.24
MW093SA	09/10/2018	3422.72	43.66	NM	NA	3379.06
MW093SA	04/10/2019	3422.72	43.22	NM	NA	3379.50
MW093SA	10/07/2019	3422.72	43.82	NM	NA	3378.90
MW094	11/01/2011	3443.15	61.82	NM	NA	3381.33
MW094	05/01/2012	3443.15	61.99	NM	NA	3381.16
MW094	10/24/2012	3443.15	62.03	NM	NA	3381.12
MW094	04/30/2013	3443.15	62.13	NM	NA	3381.02
MW094	10/28/2013	3443.15	62.07	NM	NA	3381.08
MW094	05/05/2014	3443.15	62.26	NM	NA	3380.89
MW094	11/03/2014	3443.15	62.18	NM	NA	3380.97
MW094	05/06/2015	3443.15	62.03	NM	NA	3381.12
MW094	11/03/2015	3443.15	61.95	NM	NA	3381.20
MW094	05/09/2016	3443.15	61.92	NM	NA	3381.23
MW094	09/22/2016	3443.15	62.02	NM	NA	3381.13
MW094	05/02/2017	3443.15	61.62	NM	NA	3381.53
MW094	03/21/2018	3443.15	61.43	NM	NA	3381.72
MW094	04/10/2019	3443.15	61.10	NM	NA	3382.05
MW095	11/01/2011	3436.13	55.05	NM	NA	3381.08
MW095	05/01/2012	3436.13	55.13	NM	NA	3381.00
MW095	10/24/2012	3436.13	55.17	NM	NA	3380.96
MW095	05/01/2013	3436.13	55.38	NM	NA	3380.75
MW095	10/29/2013	3436.13	55.52	NM	NA	3380.61
MW095	05/05/2014	3436.13	55.50	NM	NA	3380.63
MW095	11/06/2014	3436.13	55.52	NM	NA	3380.61
MW095	05/06/2015	3436.13	55.21	NM	NA	3380.92
MW095	11/03/2015	3436.13	55.13	NM	NA	3381.00
MW095	05/09/2016	3436.13	55.00	NM	NA	3381.13
MW095	09/22/2016	3436.13	55.08	NM	NA	3381.05
MW095	05/02/2017	3436.13	54.68	NM	NA	3381.45
MW095	03/20/2018	3436.13	54.44	NM	NA	3381.69
MW095	09/13/2018	3436.13	54.4	NM	NA	3381.73
MW095	04/10/2019	3436.13	54.19	NM	NA	3381.94
MW095	10/07/2019	3436.13	54.29	NM	NA	3381.84
MW096P	05/05/2014	NM	49.80	NM	NA	NM
MW096P	11/03/2014	NM	49.30	NM	NA	NM
MW096P	05/06/2015	NM	49.10	NM	NA	NM
MW096P	11/03/2015	NM	49.11	NM	NA	NM
MW096P	05/12/2016	NM	48.91	NM	NA	NM
MW096P	09/21/2016	NM	48.70	NM	NA	NM
MW096P	05/03/2017	NM	48.24	NM	NA	NM
MW097P	05/05/2014	NM	48.26	NM	NA	NM
MW097P	11/04/2014	NM	47.70	NM	NA	NM
MW097P	05/06/2015	NM	47.61	NM	NA	NM
MW097P	11/02/2015	NM	47.54	NM	NA	NM
MW097P	05/12/2016	NM	48.91	NM	NA	NM
MW097P	09/21/2016	NM	47.23	NM	NA	NM
MW097P	05/03/2017	NM	46.71	NM	NA	NM
MW097P	03/20/2018	NM	46.45	NM	NA	NM
MW097P	04/10/2019	NM	46.30	NM	NA	NM
MW099	05/02/2017	3444.76	62.73	NM	NA	3382.03
MW099	09/18/2017	3444.76	62.68	NM	NA	3382.08
MW099	03/21/2018	3444.76	62.59	NM	NA	3382.17
MW099	09/13/2018	3444.76	62.9	NM	NA	3381.86
MW099	04/10/2019	3444.76	DRY	NM	NA	NM
MW099	10/07/2019	3444.76	62.37	NM	NA	3382.39
MW100	05/03/2017	3406.49	52.66	NM	NA	3353.83
MW100	09/14/2017	3406.49	52.44	NM	NA	3354.05
MW100	03/21/2018	3406.49	52.32	NM	NA	3354.17
MW100	09/10/2018	3406.49	52.28	NM	NA	3354.21
MW100	04/09/2019	3406.49	51.72	NM	NA	3354.77
MW100	10/07/2019	3406.49	51.71	NM	NA	3354.78
RolandWW	12/18/1997	3419.47	43.12	NM	NA	3376.35
RolandWW	11/16/1999	3419.47	41.58	NM	NA	3377.89
RolandWW	05/15/2001	3419.47	41.06	NM	NA	3378.41
RolandWW	08/23/2001	3419.47	40.92	NM	NA	3378.55
RolandWW	01/21/2002	3419.47	41.09	NM	NA	3378.38

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
RolandWW	04/4/2002	3419.47	41.32	NM	NA	3378.15
RolandWW	09/3/2002	3419.47	40.90	NM	NA	3378.57
RolandWW	12/2/2002	3419.47	40.80	NM	NA	3378.67
RolandWW	01/31/2003	3419.47	40.79	NM	NA	3378.68
RolandWW	03/28/2003	3419.47	40.74	NM	NA	3378.73
RolandWW	06/3/2003	3419.47	40.92	NM	NA	3378.55
RolandWW	09/9/2003	3419.47	41.03	NM	NA	3378.44
RolandWW	12/2/2003	3419.47	41.14	NM	NA	3378.33
RolandWW	03/30/2004	3419.47	41.35	NM	NA	3378.12
RolandWW	06/7/2004	3419.47	41.17	NM	NA	3378.30
RolandWW	03/31/2005	3419.47	39.62	NM	NA	3379.85
RolandWW	05/23/2005	3419.47	39.81	NM	NA	3379.66
RolandWW	06/23/2006	3419.47	39.56	NM	NA	3379.91
RolandWW	03/11/2009	3419.47	39.69	NM	NA	3379.78
RolandWW	03/1/2010	3419.47	0.00	NM	NA	3419.47
RolandWW	05/2/2017	3419.47	38.99	NM	NA	3380.48
RW001	11/16/1999	3428.32	50.41	NM	NA	3377.91
RW001	05/15/2001	3428.32	49.65	NM	NA	3378.67
RW001	08/23/2001	3428.32	50.04	NM	NA	3378.28
RW001	01/21/2002	3428.32	49.85	NM	NA	3378.47
RW001	04/04/2002	3428.32	49.97	NM	NA	3378.35
RW001	09/03/2002	3428.32	49.88	NM	NA	3378.44
RW001	12/02/2002	3428.32	49.53	NM	NA	3378.79
RW001	01/31/2003	3428.32	49.63	NM	NA	3378.69
RW001	03/28/2003	3428.32	49.62	NM	NA	3378.70
RW001	05/19/2003	3428.32	49.51	NM	NA	3378.81
RW001	09/09/2003	3428.32	49.66	NM	NA	3378.66
RW001	12/03/2003	3428.32	49.71	NM	NA	3378.61
RW001	03/30/2004	3428.32	49.81	NM	NA	3378.51
RW001	06/07/2004	3428.32	49.75	NM	NA	3378.57
RW001	09/17/2004	3428.32	49.34	NM	NA	3378.98
RW001	11/29/2004	3428.32	48.80	NM	NA	3379.52
RW001	03/31/2005	3428.32	48.43	NM	NA	3379.89
RW001	05/23/2005	3428.32	50.25	NM	NA	3378.07
RW002	01/21/2002	3431.66	52.98	NM	NA	3378.68
RW002	04/04/2002	3431.66	53.05	NM	NA	3378.61
RW002	09/03/2002	3431.66	52.95	NM	NA	3378.71
RW002	12/02/2002	3431.66	52.81	NM	NA	3378.85
RW002	01/30/2003	3431.66	52.75	NM	NA	3378.91
RW002	03/28/2003	3431.66	52.76	NM	NA	3378.90
RW002	05/19/2003	3431.66	52.73	NM	NA	3378.93
RW002	09/09/2003	3431.66	52.72	NM	NA	3378.94
RW002	12/03/2003	3431.66	52.66	NM	NA	3379.00
RW002	03/30/2004	3431.66	52.77	NM	NA	3378.89
RW002	06/07/2004	3431.66	52.77	NM	NA	3378.89
RW002	11/29/2004	3431.66	52.34	NM	NA	3379.32
RW002	03/31/2005	3431.66	51.05	NM	NA	3380.61
RW002	05/23/2005	3431.66	51.77	NM	NA	3379.89
RW002	01/16/2006	3431.66	51.35	NM	NA	3380.31
RW002	06/19/2006	3431.66	51.11	NM	NA	3380.55
RW002	03/29/2007	3431.66	50.60	NM	NA	3381.06
RW002	03/24/2008	3431.66	50.45	NM	NA	3381.21
RW002	03/11/2009	3431.66	50.70	NM	NA	3380.96
RW002	03/01/2010	3431.66	50.94	NM	NA	3380.72
RW002	08/03/2010	3431.66	50.98	NM	NA	3380.68
RW002	05/05/2011	3431.66	50.80	NM	NA	3380.86
RW002	11/02/2011	3431.66	48.72	NM	NA	3382.94
RW002	05/03/2012	3431.66	50.99	NM	NA	3380.67
RW002	10/23/2012	3431.66	51.15	NM	NA	3380.51
RW002	05/02/2013	3431.66	51.34	NM	NA	3380.32
RW003	01/21/2002	3429.82	50.75	NM	NA	3379.07
RW003	04/04/2002	3429.82	50.78	NM	NA	3379.04
RW003	09/03/2002	3429.82	50.75	NM	NA	3379.07
RW003	12/02/2002	3429.82	50.56	NM	NA	3379.26
RW003	01/30/2003	3429.82	50.45	NM	NA	3379.37
RW003	03/28/2003	3429.82	50.55	NM	NA	3379.27
RW003	05/19/2003	3429.82	50.49	NM	NA	3379.33
RW003	09/09/2003	3429.82	50.40	NM	NA	3379.42
RW003	12/03/2003	3429.82	50.34	NM	NA	3379.48
RW003	03/30/2004	3429.82	50.53	NM	NA	3379.29

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
RW003	06/07/2004	3429.82	50.43	NM	NA	3379.39
RW003	11/30/2004	3429.82	50.13	NM	NA	3379.69
RW003	03/31/2005	3429.82	49.90	NM	NA	3379.92
RW003	05/23/2005	3429.82	49.55	NM	NA	3380.27
RW003	01/16/2006	3429.82	49.20	NM	NA	3380.62
RW003	06/19/2006	3429.82	48.95	NM	NA	3380.87
RW003	04/02/2007	3429.82	48.53	NM	NA	3381.29
RW003	03/19/2008	3429.82	48.30	NM	NA	3381.52
RW003	03/11/2009	3429.82	48.58	NM	NA	3381.24
RW003	03/01/2010	3429.82	48.86	NM	NA	3380.96
RW003	08/03/2010	3429.82	48.92	NM	NA	3380.90
RW003	05/05/2011	3429.82	48.78	NM	NA	3381.04
RW003	11/02/2011	3429.82	49.13	NM	NA	3380.69
RW003	05/03/2012	3429.82	48.92	NM	NA	3380.90
RW003	10/24/2012	3429.82	48.96	NM	NA	3380.86
RW003	05/01/2013	3429.82	49.12	NM	NA	3380.70
RW003	10/29/2013	3429.82	49.18	NM	NA	3380.64
RW003	05/05/2014	3429.82	49.27	NM	NA	3380.55
RW003	11/03/2014	3429.82	49.12	NM	NA	3380.70
RW003	05/06/2015	3429.82	48.88	NM	NA	3380.94
RW003	09/16/2015	3429.82	48.67	NM	NA	3381.15
RW003	11/03/2015	3429.82	48.78	NM	NA	3381.04
RW003	05/09/2016	3429.82	48.63	NM	NA	3381.19
RW003	05/02/2017	3429.82	48.20	NM	NA	3381.62
RW004A	01/21/2002	3430.11	51.51	NM	NA	3378.6
RW004A	04/04/2002	3430.11	51.59	NM	NA	3378.52
RW004A	09/03/2002	3430.11	51.45	NM	NA	3378.66
RW004A	12/02/2002	3430.11	51.10	NM	NA	3379.01
RW004A	01/31/2003	3430.11	51.14	NM	NA	3378.97
RW004A	03/28/2003	3430.11	51.16	NM	NA	3378.95
RW004A	05/19/2003	3430.11	51.23	NM	NA	3378.88
RW004A	09/09/2003	3430.11	46.36	NM	NA	3383.75
RW004A	12/03/2003	3430.11	51.53	NM	NA	3378.58
RW004A	03/30/2004	3430.74	52.34	NM	NA	3378.4
RW004A	06/07/2004	3430.74	51.61	NM	NA	3379.13
RW004A	11/30/2004	3430.74	51.56	NM	NA	3379.18
RW004A	03/31/2005	3430.74	51.97	NM	NA	3378.77
RW004A	05/23/2005	3430.74	52.13	NM	NA	3378.61
RW004A	01/18/2006	3430.74	47.46	NM	NA	3383.28
RW004A	06/19/2006	3430.74	49.78	NM	NA	3380.96
RW004A	04/11/2007	3430.74	47.15	NM	NA	3383.59
RW004A	03/24/2008	3430.74	49.51	NM	NA	3381.23
RW004A	03/11/2009	3430.74	47.49	NM	NA	3383.25
RW004A	03/01/2010	3430.74	50.28	NM	NA	3380.46
RW004A	08/03/2010	3430.74	50.34	NM	NA	3380.4
RW004A	05/06/2011	3430.74	47.65	NM	NA	3383.09
RW004A	11/04/2011	3430.74	47.50	NM	NA	3383.24
RW004A	05/04/2012	3430.74	44.85	NM	NA	3385.89
RW004A	10/23/2012	3430.74	47.99	NM	NA	3382.75
RW004A	05/02/2013	3430.74	50.20	NM	NA	3380.54
RW004A	10/29/2013	3430.74	48.11	NM	NA	3382.63
RW004A	05/05/2014	3430.74	50.65	NM	NA	3380.09
RW004A	11/04/2014	3430.74	48.01	NM	NA	3382.73
RW004A	05/06/2015	3430.74	47.58	NM	NA	3383.16
RW004A	09/16/2015	3430.74	49.30	NM	NA	3381.44
RW004A	11/03/2015	3430.74	47.58	NM	NA	3383.16
RW004A	05/12/2016	3430.74	47.29	NM	NA	3383.45
RW004A	05/03/2017	3430.74	49.25	NM	NA	3381.49
WoodellWW	05/15/2001	3423.77	49.63	NM	NA	3374.14
WoodellWW	08/23/2001	3423.77	49.97	NM	NA	3373.80
WoodellWW	04/05/2002	3423.77	49.52	NM	NA	3374.25
WoodellWW	09/03/2002	3423.77	54.07	NM	NA	3369.70
WoodellWW	12/02/2002	3423.77	49.06	NM	NA	3374.71
WoodellWW	01/30/2003	3423.77	49.14	NM	NA	3374.63
WoodellWW	03/28/2003	3423.77	62.24	NM	NA	3361.53
WoodellWW	06/05/2003	3423.77	53.76	NM	NA	3370.01
WoodellWW	09/09/2003	3423.77	53.65	NM	NA	3370.12
WoodellWW	12/02/2003	3423.77	49.07	NM	NA	3374.70
WoodellWW	03/30/2004	3423.77	49.50	NM	NA	3374.27
WoodellWW	06/07/2004	3423.77	54.24	NM	NA	3369.53

Appendix C
Historical Groundwater Elevations
2019 Annual Groundwater Monitoring Report
Former Eunice North Gas Plant
Eunice, Lea County, New Mexico



Location ID	Date	Top of Casing (feet amsl)	Depth To Groundwater (feet)	Depth to LNAPL (feet btoc)	LNAPL Thickness (feet)	Groundwater Elevation (feet amsl)
WoodellWW	11/29/2004	3423.77	48.89	NM	NA	3374.88
WoodellWW	05/23/2005	3423.77	52.80	NM	NA	3370.97
WoodellWW	05/11/2016	3423.77	48.87	NM	NA	3374.90
WoodellWW	09/15/2016	3423.77	48.87	NM	NA	3374.90
WoodellWW	05/04/2017	3423.77	48.64	NM	NA	3375.13

Note:

1. Corrected groundwater elevations at MW006 are corrected using an assumed LNAPL specific gravity of 0.75. The formula used to correct groundwater elevation is as follows:

*Corrected GW Elevation = TOC Elevation – (DTW – LNAPL Thickness * LNAPL Specific Gravity)*

- Acronyms and Abbreviations:**
- amsl = above mean sea level
 - btoc = below top of casing
 - DTW = depth to groundwater
 - GW = groundwater
 - ID = identification
 - LNAPL = light nonaqueous phase liquid
 - NA = not applicable
 - NM = not measured
 - TOC = top of casing
 - * = potential blockage in well
 - ** = atypical measurement, not used in analysis

APPENDIX D

Laboratory Analytical Reports and Data Validation Review



Chevron North Eunice

DATA REVIEW

NORTH EUNICE, NEW MEXICO

Volatiles, TPH, Metals and Miscellaneous Analyses

SDGs # 620864, 621021, 621022, 621177, 621180, 621298, 621300 and 621481

Analyses Performed By:

Xenco Laboratories

Midland, TX

Report # 33291R

Review Level: Tier II

Project: B0048789.0004



DATA REVIEW REPORT

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 620864, 621021, 621022, 621177, 621180, 621298, 621300 and 621481 for samples collected in association with the Chevron North Eunice Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
						VOC	TPH	MET	MISC
620864	MW-100-W-190411	620864-001	Water	04-11-19				X	X
	MW076SA-W-190411	620864-002	Water	04-11-19				X	X
	MW075SA- W-190411	620864-003	Water	04-11-19				X	X
	MW084SA- W-190411	620864-004	Water	04-11-19				X	X
	MW085SA- W-190411	620864-005	Water	04-11-19				X	X
	MW086SA- W-190411	620864-006	Water	04-11-19				X	X
	MW071SA- W-190411	620864-007	Water	04-11-19				X	X
	MW065SA- W-190411	620864-008	Water	04-11-19				X	X
	MW066SA- W-190411	620864-009	Water	04-11-19				X	X
	MW073SA- W-190411	620864-010	Water	04-11-19				X	X
	MW072SA- W-190411	620864-011	Water	04-11-19				X	X
	DUP08- W-190411	620864-012	Water	04-11-19	MW-100-W-190411			X	X
621021	IW010-W-190412	621021-001	Water	04-12-19				X	X
	IW008-W-190412	621021-002	Water	04-12-19				X	X
	MW055SA-W-190412	621021-003	Water	04-12-19				X	X
	MW074SA-W-190412	621021-004	Water	04-12-19				X	X
	MW021A-W-190412	621021-005	Water	04-12-19				X	X
621022	MW062A-W-190412	621022-001	Water	04-12-19				X	X
	MW063A-W-190412	621022-002	Water	04-12-19				X	X
	MW024A-W-190412	621022-003	Water	04-12-19				X	X
	MW099-W-190412	621022-004	Water	04-12-19				X	X
	MW070-W-190412	621022-005	Water	04-12-19				X	X
	MW030-W-190412	621022-006	Water	04-12-19				X	X

DATA REVIEW REPORT

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
						VOC	TPH	MET	MISC
	DUP06-W-190412	621022-007	Water	04-12-19	MW058-W-190412			X	X
	MW058-W-190412	621022-008	Water	04-12-19				X	X
621177	MW057SA-W-190415	621177-001	Water	04-15-19		X	X	X	X
	MW043-W-190415	621177-002	Water	04-15-19				X	X
	MW050SA-W-190415	621177-003	Water	04-15-19				X	X
	MW051SA-W-190415	621177-004	Water	04-15-19				X	X
	MW079SA-W-190415	621177-005	Water	04-15-19				X	X
	IW003-W-190415	621177-006	Water	04-15-19				X	X
621180	MW023-W-190415	621180-001	Water	04-15-19				X	X
	MW059-W-190415	621180-002	Water	04-15-19				X	X
	MW031-W-190415	621180-003	Water	04-15-19				X	X
	MW069-W-190415	621180-004	Water	04-15-19				X	X
	MW068-W-190415	621180-005	Water	04-15-19				X	X
621298	MW095-W-190416	621298-001	Water	04-16-19				X	X
	MW060-W-190416	621298-002	Water	04-16-19				X	X
	MW061-W-190416	621298-003	Water	04-16-19				X	X
	MW094-W-190416	621298-004	Water	04-16-19				X	X
	MW032-W-190416	621298-005	Water	04-16-19				X	X
	MW027-W-190416	621298-006	Water	04-16-19				X	X
	MW026-W-190416	621298-007	Water	04-16-19				X	X
	MW015A-W-190416	621298-008	Water	04-16-19				X	X
	MW013-W-190416	621298-009	Water	04-16-19				X	X
	MW040A-W-190416	621298-010	Water	04-16-19				X	X
	MW010-W-190416	621298-011	Water	04-16-19				X	X
	MW037-W-190416	621298-012	Water	04-16-19		X	X	X	X
	MW004A-W-190416	621298-013	Water	04-16-19				X	X
	IW024-W-190416	621298-014	Water	04-16-19				X	X
	DUP04-W-190416	621298-015	Water	04-16-19	MW032-W-190416			X	X
	DUP07-W-190416	621298-016	Water	04-16-19	MW095-W-190416			X	X
621300	MW054SA-W-190416	621300-001	Water	04-16-19				X	X

DATA REVIEW REPORT

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
						VOC	TPH	MET	MISC
	MW052SA-W-190416	621300-002	Water	04-16-19				X	X
	MW049SA-W-190416	621300-003	Water	04-16-19				X	X
	MW048SA-W-190416	621300-004	Water	04-16-19				X	X
	MW041A-W-190416	621300-005	Water	04-16-19				X	X
	IW019-W-190416	621300-006	Water	04-16-19		X	X	X	X
	MW093SA-W-190416	621300-007	Water	04-16-19				X	X
	IW023-W-190416	621300-008	Water	04-16-19				X	X
	MW020A-W-190416	621300-009	Water	04-16-19				X	X
	DUP01-W-190416	621300-010	Water	04-16-19	IW019-W-190416	X	X	X	X
	MW019A-W-190416	621300-011	Water	04-16-19				X	X
	MW018-W-190416	621300-012	Water	04-16-19				X	X
	MW097P-W-190416	621300-013	Water	04-16-19				X	X
	DUP03-W-190416	621300-014	Water	04-16-19	MW020A-W-190416			X	X
621481	MW090SA-W-190417	621481-001	Water	04-17-19				X	X
	MW089SA-W-190417	621481-002	Water	04-17-19				X	X
	MW007A-W-190417	621481-003	Water	04-17-19				X	X
	MW047-W-190417	621481-004	Water	04-17-19				X	X
	MW001-W-190417	621481-005	Water	04-17-19		X	X	X	X
	MW002A-W-190417	621481-006	Water	04-17-19				X	X
	MW046A-W-190417	621481-007	Water	04-17-19		X	X	X	X
	MW045-W-190417	621481-008	Water	04-17-19		X	X	X	X
	MW012M-W-190417	621481-009	Water	04-17-19				X	X
	MW088M-W-190417	621481-010	Water	04-17-19				X	X
	MW087A-W-190417	621481-011	Water	04-17-19				X	X
	MW008M-W-190417	621481-012	Water	04-17-19				X	X
	MW011A-W-190417	621481-013	Water	04-17-19				X	X
	MW056SA-W-190417	621481-014	Water	04-17-19				X	X
	DUP05-W-190417	621481-015	Water	04-17-19	MW045-W-190417	X	X	X	X

DATA REVIEW REPORT**ANALYTICAL DATA PACKAGE DOCUMENTATION**

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

DATA REVIEW REPORT

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8021B and 8015 Mod. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW REPORT**VOLATILE ORGANIC COMPOUND (VOC) ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8021B	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

DATA REVIEW REPORT

The MS/MSD analysis performed on sample MW045-W-190417 exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

SDG	Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
621298	MW037-W-190416	Benzene		0.719 D	0.719 D

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8021B	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks	X				X	
C. Trip blanks	X				X	
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate(LCSD)		X		X		
LCS/LCSD Precision (RPD)		X		X		
Matrix Spike (MS)		X		X		
Matrix Spike Duplicate(MSD)		X		X		
MS/MSD Precision (RPD)		X		X		
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	

Notes:

%R Percent recovery

RPD Relative percent difference

DATA REVIEW REPORT**TPH ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
TPH by SW-846 8015B	Water	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on samples MW043-W-20190415 and MW001-W-20190417 exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

DATA REVIEW REPORT

5. Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate Analysis (LCSD)

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR TPH

DRO/GRO; SW-846 8015 Mod	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R - percent recovery

RPD - relative percent difference

DATA REVIEW REPORT

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 6020A, 7196A, EPA 300 and SM 2540C. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
 - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
 - E The reported value is estimated due to the presence of interference.
 - N Spiked sample recovery is not within control limits.
 - * Duplicate analysis is not within control limits.
- Validation Qualifiers
 - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
 - UB Analyte considered non-detect at the listed value due to associated blank contamination.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW REPORT**METALS ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6020A	Water	180 days from collection to analysis	Preserved to a pH of less than 2.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed on samples MW100-W-190411, MW095-W-190416 and MW090SA-W-190417 exhibited acceptable recoveries and RPD between MS/MSD recoveries.

3.2 Laboratory Duplicate Analysis

The laboratory duplicates relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

DATA REVIEW REPORT

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

SDGs	Sample ID/Duplicate ID	Analytes	Sample Result	Duplicate Result	RPD
620864	MW-100-W-190411/DUP08- W-190411	Arsenic	0.0106	0.0106	AC
		Chromium	0.00733	0.00692	AC
		Iron	0.360	0.345	AC
		Manganese	0.299	0.303	1.3%
621022	MW058-W-190412/DUP06- W-190412	Arsenic	0.0127	0.013	AC
		Chromium	3.16	3.25	2.8%
621298	MW032-W-190416/DUP04- W-190416	Chromium	0.00473	0.00505	6.5%
		Arsenic	0.00370 J	0.00315 J	AC
		Iron	0.100 U	0.0230 J	AC
		Manganese	0.00172 J	0.00127 J	AC
	MW095- W-190416/DUP07- W-190416	Arsenic	0.00930	0.00823	AC
		Chromium	3.77	3.97	5.2%
		Iron	0.242	0.239	1.2%
		Manganese	0.147	0.126	15.4%
621300	IW019-W-190416/DUP01- W-190416	Arsenic	0.00987	0.0106 J	AC
		Chromium	0.672	0.736	AC
		Iron	0.0721 J	0.500 U	AC
		Manganese	0.139	0.105	AC
	MW020A-W-190416/DUP03-W-190416	Arsenic	0.0111 J	0.0106 J	AC
		Chromium	0.00560 J	0.00511 J	AC
		Manganese	0.00112 J	0.00123 J	AC
621481	MW045-W-190417/DUP-05- W-190417	Chromium	0.0120	0.0111	7.8%
		Manganese	0.0782	0.0736	6.1%
		Iron	0.0767 J	0.0544 J	AC
		Arsenic	0.00232 J	0.00221 J	AC

Notes:

AC = Acceptable

DATA REVIEW REPORT

The calculated RPDs between the parent sample and field duplicate were acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS/LCSD analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR METAL

METALS; SW-846 6020A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks	X				X
B. Method Blanks		X		X	
C. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
ICP Serial Dilution %D	X				X
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

%D – difference

DATA REVIEW REPORT**GENERAL CHEMISTRY ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Hexavalent Chromium by SW-846 7196A	Water	24 hours from collection to analysis	Cool to <6 °C.
Chloride by EPA 300.0	Water	28 days from collection to analysis	Cool to <6 °C.
Total Dissolved Solids by SM 2540C	Water	7 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were greater than the BAL. Therefore, no other qualification of the sample results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

All analytes associated with MS/MSD recoveries were within control limits with the exception of the following analytes present in the table below.

SDG#	Sample ID	Analyte	MS Recovery	MSD Recovery
621298	MW060-W-190416	Chromium, Hexavalent	<LL but>30%	<LL but>30%

DATA REVIEW REPORT

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of an MS deviation, the sample results are qualified. The qualifications are applied to the parent sample result associated with this SDG.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery <30%	Non-detect	R
	Detect	J
MS percent recovery >125%	Non-detect	No Action
	Detect	J

3.2 Laboratory Duplicate Analysis

The laboratory duplicates relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one time the RL is applied for water matrices and two times the RL for soil matrices.

The laboratory duplicate sample results exhibited RPD within the control limit.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

SDG#	Sample ID/Duplicate ID	Analytes	Sample Result (mg/l)	Duplicate Result (mg/l)	RPD
620864	MW-100-W-190411/DUP08- W-190411	Chloride	948	976	2.9%
		Total Dissolved Solids	1900	1970	3.6%
621022	MW058-W-190412/DUP06- W-190412	Chloride	1150	1040	10%
		Total Dissolved Solids	4180	3900	6.9%
		Chromium, Hexavalent	2.74	2.9	5.7%
621298	MW032-W-190416/DUP04- W-190416	Chloride	386	374	3.2%
		Total Dissolved Solids	1340	372	113.1%

DATA REVIEW REPORT

SDG#	Sample ID/Duplicate ID	Analytes	Sample Result (mg/l)	Duplicate Result (mg/l)	RPD
621298	MW095- W-190416/DUP07- W-190416	Chloride	1500	1410	6.2%
		Total Dissolved Solids	3760	5320	34.4%
		Chromium, Hexavalent	3.46	3.54	2.3%
621300	IW019-W-190416/DUP01- W-190416	Chloride	1130	361	103.2%
		Total Dissolved Solids	3310	3190	3.7%
		Chromium, Hexavalent	0.664	0.698	5.0%
	MW020A-W-190416/DUP03-W-190416	Chloride	1320	1060	21.8%
		Total Dissolved Solids	2180	2140	1.8%
621481	MW045-W-190417/DUP-05- W-190417	Chloride	76	77.3	1.7%
		Total Dissolved Solids	1460	1400	4.2%

Notes:

AC = Acceptable

The analyte chloride associated with field duplicate pair IW019-W-190416/DUP01- W-190416 exhibited a field duplicate RPD greater than the control limit. The chloride result in associated samples were qualified as estimated.

The analyte total dissolved solids associated with field duplicate pairs MW032-W-190416/DUP04- W-190416 and MW095- W-190416/DUP07- W-190416 exhibited a field duplicate RPD greater than the control limit. Total dissolved solid result in associated sample were qualified as estimated.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS/LCSD analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SW7196A, EPA 300.0 and SM 2540C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate(MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X	X		
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%RSD – relative standard deviation

%R - percent recovery

RPD - relative percent difference,

DATA REVIEW REPORT

VALIDATION PERFORMED BY: Suresh PR

SIGNATURE: 

DATE: September 09, 2019

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS





Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No:

0208604

www.xenco.com

Page 1 of 2

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com
Project Name:	Eunice Project-N. Eunice	Turn Around	
Project Number:	730048789	Routine ☒	
P.O. Number:	730048789	Rush:	
Sampler's Name:	Jay S. Howard	Due Date:	

SAMPLE RECEIPT				ANALYSIS REQUEST										Work Order Notes				
Temperature (°C):	26.25	Temp Blank:	Yes No	Wet Ice:	Yes No											TAT starts the day received by the lab, if received by 4:30pm		
Received Intact:	Yes No	Thermometer ID:																
Cooler Custody Seals:	Yes No	Correction Factor:																
Sample Custody Seals:	Yes No	Total Containers:																
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										Sample Comments			
MW0100	W	08/11/19	0759		8													
MW0765A			0846		8													
MW0755A			0921		8													
MW0845A			0941		8													
MW0855A			1008		8													
MW0865A			1032		8													
MW0715A			1140		8													
MW0655A			1230		8													
MW0665A			1253		8													
MW0735A	W	08/11/19	1318		8													

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Ni Se Ag Ti U	
		1631 / 245.1 / 7470 / 7471 : Hg	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Jay S. Howard	Brett Krehbiel	08/11/19 16:17	Jay S. Howard	Brett Krehbiel	08/11/19 18:00



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Work Order No.:

02064

[illegible]



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW100**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-001

Date Collected: 04.11.2019 07:59

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	948	10.0	1.72	mg/L	04.17.2019 22:58		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1900	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	04.17.2019 17:44		1
Chromium	7440-47-3	0.00733	0.00400	0.000525	mg/L	04.17.2019 17:44		1
Iron	7439-89-6	0.360	0.100	0.0227	mg/L	04.17.2019 17:44		1
Manganese	7439-96-5	0.299	0.00200	0.000199	mg/L	04.17.2019 17:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	UK U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW076SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-002

Date Collected: 04.11.2019 08:46

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	601	10.0	1.72	mg/L	04.17.2019 23:07		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1950	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0123	0.00400	0.000246	mg/L	04.17.2019 18:05		1
Chromium	7440-47-3	0.0119	0.00400	0.000525	mg/L	04.17.2019 18:05		1
Iron	7439-89-6	0.225	0.100	0.0227	mg/L	04.17.2019 18:05		1
Manganese	7439-96-5	0.00388	0.00200	0.000199	mg/L	04.17.2019 18:05		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0143	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW075SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-003

Date Collected: 04.11.2019 09:21

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	466	10.0	1.72	mg/L	04.17.2019 23:15		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1770	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0134	0.00400	0.000246	mg/L	04.17.2019 18:07		1
Chromium	7440-47-3	0.0128	0.00400	0.000525	mg/L	04.17.2019 18:07		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 18:07	U	1
Manganese	7439-96-5	0.000224	0.00200	0.000199	mg/L	04.17.2019 18:07	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00940	0.0100	0.00273	mg/L	04.12.2019 08:04	J	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW084SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-004

Date Collected: 04.11.2019 09:41

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1220	25.0	4.29	mg/L	04.17.2019 23:23		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5910	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00962	0.00400	0.000246	mg/L	04.17.2019 18:10		1
Chromium	7440-47-3	0.0205	0.00400	0.000525	mg/L	04.17.2019 18:10		1
Iron	7439-89-6	0.415	0.100	0.0227	mg/L	04.17.2019 18:10		1
Manganese	7439-96-5	0.0177	0.00200	0.000199	mg/L	04.17.2019 18:10		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0167	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW085SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-005

Date Collected: 04.11.2019 10:08

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1580	25.0	4.29	mg/L	04.17.2019 23:32		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3660	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.00400	0.000246	mg/L	04.17.2019 18:13		1
Chromium	7440-47-3	0.0559	0.00400	0.000525	mg/L	04.17.2019 18:13		1
Iron	7439-89-6	0.319	0.100	0.0227	mg/L	04.17.2019 18:13		1
Manganese	7439-96-5	0.0265	0.00200	0.000199	mg/L	04.17.2019 18:13		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0236	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW086SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-006

Date Collected: 04.11.2019 10:32

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1370	25.0	4.29	mg/L	04.18.2019 00:05		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	04.17.2019 18:16		1
Chromium	7440-47-3	0.0482	0.00400	0.000525	mg/L	04.17.2019 18:16		1
Iron	7439-89-6	0.0839	0.100	0.0227	mg/L	04.17.2019 18:16	J	1
Manganese	7439-96-5	0.00235	0.00200	0.000199	mg/L	04.17.2019 18:16		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0385	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW071SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-007

Date Collected: 04.11.2019 11:40

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	636	5.00	0.858	mg/L	04.18.2019 12:56		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1490	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00836	0.00400	0.000246	mg/L	04.17.2019 18:19		1
Chromium	7440-47-3	0.00587	0.00400	0.000525	mg/L	04.17.2019 18:19		1
Iron	7439-89-6	0.0284	0.100	0.0227	mg/L	04.17.2019 18:19	J	1
Manganese	7439-96-5	0.216	0.00200	0.000199	mg/L	04.17.2019 18:19		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW065SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-008

Date Collected: 04.11.2019 12:30

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1050	10.0	1.72	mg/L	04.18.2019 00:14		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2590	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	04.17.2019 18:22		1
Chromium	7440-47-3	0.0134	0.00400	0.000525	mg/L	04.17.2019 18:22		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 18:22	U	1
Manganese	7439-96-5	0.0107	0.00200	0.000199	mg/L	04.17.2019 18:22		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00690	0.0100	0.00273	mg/L	04.12.2019 08:04	J	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW066SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-009

Date Collected: 04.11.2019 12:53

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	836	10.0	1.72	mg/L	04.18.2019 00:39		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2040	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00974	0.00400	0.000246	mg/L	04.17.2019 18:25		1
Chromium	7440-47-3	0.0179	0.00400	0.000525	mg/L	04.17.2019 18:25		1
Iron	7439-89-6	0.0678	0.100	0.0227	mg/L	04.17.2019 18:25	J	1
Manganese	7439-96-5	0.0699	0.00200	0.000199	mg/L	04.17.2019 18:25		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00650	0.0100	0.00273	mg/L	04.12.2019 08:04	J	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW073SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-010

Date Collected: 04.11.2019 13:18

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1000	10.0	1.72	mg/L	04.18.2019 00:47		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2020	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0102	0.00400	0.000246	mg/L	04.17.2019 18:27		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.17.2019 18:27	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 18:27	U	1
Manganese	7439-96-5	0.00344	0.00200	0.000199	mg/L	04.17.2019 18:27		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW072SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-011

Date Collected: 04.11.2019 13:38

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	218	5.00	0.858	mg/L	04.18.2019 00:55		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1050	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0186	0.00400	0.000246	mg/L	04.17.2019 18:30		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.17.2019 18:30	U	1
Iron	7439-89-6	0.0464	0.100	0.0227	mg/L	04.17.2019 18:30	J	1
Manganese	7439-96-5	0.00182	0.00200	0.000199	mg/L	04.17.2019 18:30	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:50	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP08**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-012

Date Collected: 04.11.2019 00:00

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	976	10.0	1.72	mg/L	04.18.2019 01:04		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	04.17.2019 18:39		1
Chromium	7440-47-3	0.00692	0.00400	0.000525	mg/L	04.17.2019 18:39		1
Iron	7439-89-6	0.345	0.100	0.0227	mg/L	04.17.2019 18:39		1
Manganese	7439-96-5	0.303	0.00200	0.000199	mg/L	04.17.2019 18:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:50	UK U	1



Chain of Custody

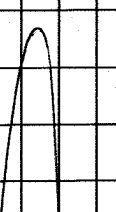
Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No: 6021021

www.xenco.com Page 1 of 1

Project Manager:	Brett Krehbiel	Bill to: (if different)	NA
Company Name:	ARCADIS	Company Name:	NA
Address:	1004 N. Big Spring St.	Address:	NA
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	NA
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Work Order Comments	
Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Turn Around		ANALYSIS REQUEST										Work Order Notes	
Project Number:	30048758	Routine	☒												
P.O. Number:	30088789	Rush:													
Sampler's Name:	Tom S. Longwell	Due Date:													
SAMPLE RECEIPT Temp Blank: Yes No Wet: Yes No Temperature (°C): <u>51.50</u> Received Intact: Yes No Thermometer ID: <u>RS</u> Cooler Custody Seals: Yes No Correction Factor: <u>0.01</u> Sample Custody Seals: Yes No Total Containers: <u>8</u>															
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										Sample Comments
					BTEX (SW8021)	TPH (SW8015)	Hex Chrome (SW7196A)	Dissolved Metals (SW6020-DIS): Arsenic, Manganese, Iron & Chromium	TDS (SW2640)	Chlorides (E300)					
TW000	W	4/12/19	0955		8									TAT starts the day received by the lab, if received by 4:30pm	
TW008	W	4/12/19	0920		8										
MW005550	W	4/12/19	0951		9										
MW0745A	W	4/12/19	1011		8										
MW021A	W	4/12/19	1034		8										
															

Total 200.7 / 6010 200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K-Se-Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4.12.19 1051			



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW010**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-001

Date Collected: 04.12.2019 08:55

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2280	25.0	4.29	mg/L	04.19.2019 05:09		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3120	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00899	0.00400	0.000246	mg/L	04.18.2019 21:38		1
Chromium	7440-47-3	0.00202	0.00400	0.000525	mg/L	04.18.2019 21:38	J	1
Iron	7439-89-6	11.8	0.100	0.0227	mg/L	04.18.2019 21:38		1
Manganese	7439-96-5	7.96	0.200	0.0199	mg/L	04.19.2019 12:21	Đ	100

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00310	0.0100	0.00273	mg/L	04.12.2019 18:15	J	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW008**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-002

Date Collected: 04.12.2019 09:20

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	875	10.0	1.72	mg/L	04.19.2019 05:18		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2160	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0235	0.00400	0.000246	mg/L	04.18.2019 21:49		1
Chromium	7440-47-3	0.00388	0.00400	0.000525	mg/L	04.18.2019 21:49	J	1
Iron	7439-89-6	4.78	0.100	0.0227	mg/L	04.18.2019 21:49		1
Manganese	7439-96-5	1.90	0.0400	0.00397	mg/L	04.19.2019 12:24	Đ	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW055SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-003

Date Collected: 04.12.2019 09:51

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	653	10.0	1.72	mg/L	04.19.2019 05:26		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1700	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00749	0.00400	0.000246	mg/L	04.18.2019 21:52		1
Chromium	7440-47-3	0.177	0.00400	0.000525	mg/L	04.18.2019 21:52		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 21:52	U	1
Manganese	7439-96-5	0.000651	0.00200	0.000199	mg/L	04.18.2019 21:52	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.157	0.0100	0.00273	mg/L	04.12.2019 18:15		1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW074SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-004

Date Collected: 04.12.2019 10:11

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	384	5.00	0.858	mg/L	04.19.2019 05:34		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1520	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0151	0.00400	0.000246	mg/L	04.18.2019 21:55		1
Chromium	7440-47-3	0.00508	0.00400	0.000525	mg/L	04.18.2019 21:55		1
Iron	7439-89-6	0.0318	0.100	0.0227	mg/L	04.18.2019 21:55	J	1
Manganese	7439-96-5	0.000585	0.00200	0.000199	mg/L	04.18.2019 21:55	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW021A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-005

Date Collected: 04.12.2019 10:34

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1020	25.0	4.29	mg/L	04.19.2019 06:08		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5150	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0110	0.00400	0.000246	mg/L	04.18.2019 21:58		1
Chromium	7440-47-3	0.00295	0.00400	0.000525	mg/L	04.18.2019 21:58	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 21:58	U	1
Manganese	7439-96-5	0.0126	0.00200	0.000199	mg/L	04.18.2019 21:58		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **3085768-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3085768-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1

Sample Id: **3086275-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086275-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	04.15.2019 15:42	U	1

Sample Id: **7676022-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676022-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.18.2019 13:54	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 13:54	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 13:54	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 13:54	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **7676094-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676094-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.19.2019 03:20	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW062A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-001

Date Collected: 04.12.2019 10:00

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	62.9	2.50	0.429	mg/L	04.19.2019 06:16		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	474	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0249	0.00400	0.000246	mg/L	04.18.2019 22:01		1
Chromium	7440-47-3	0.00200	0.00400	0.000525	mg/L	04.18.2019 22:01	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:01	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:01	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW063A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-002

Date Collected: 04.12.2019 10:40

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	58.5	2.50	0.429	mg/L	04.19.2019 06:41		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	459	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0244	0.00400	0.000246	mg/L	04.18.2019 22:04		1
Chromium	7440-47-3	0.00160	0.00400	0.000525	mg/L	04.18.2019 22:04	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:04	U	1
Manganese	7439-96-5	0.000653	0.00200	0.000199	mg/L	04.18.2019 22:04	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW024A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-003

Date Collected: 04.12.2019 11:10

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	997	10.0	1.72	mg/L	04.19.2019 06:50		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2140	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0119	0.00400	0.000246	mg/L	04.18.2019 22:07		1
Chromium	7440-47-3	0.500	0.00400	0.000525	mg/L	04.18.2019 22:07		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:07	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:07	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.474	0.0100	0.00273	mg/L	04.12.2019 17:30		1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW099**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-004

Date Collected: 04.12.2019 11:50

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	72.8	2.50	0.429	mg/L	04.19.2019 06:58		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	453	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00744	0.00400	0.000246	mg/L	04.18.2019 22:10		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 22:10	U	1
Iron	7439-89-6	0.0423	0.100	0.0227	mg/L	04.18.2019 22:10	J	1
Manganese	7439-96-5	0.180	0.00200	0.000199	mg/L	04.18.2019 22:10		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW070**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-005

Date Collected: 04.12.2019 13:30

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	444	5.00	0.858	mg/L	04.19.2019 07:06		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1130	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.00400	0.000246	mg/L	04.18.2019 22:13		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 22:13	U	1
Iron	7439-89-6	0.0443	0.100	0.0227	mg/L	04.18.2019 22:13	J	1
Manganese	7439-96-5	0.000935	0.00200	0.000199	mg/L	04.18.2019 22:13	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW030**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-006

Date Collected: 04.12.2019 13:55

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	220	2.50	0.429	mg/L	04.19.2019 07:15		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	694	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0197	0.00400	0.000246	mg/L	04.18.2019 22:16		1
Chromium	7440-47-3	0.00126	0.00400	0.000525	mg/L	04.18.2019 22:16	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:16	U	1
Manganese	7439-96-5	0.000594	0.00200	0.000199	mg/L	04.18.2019 22:16	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP06**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-007

Date Collected: 04.12.2019 00:00

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1040	5.00	0.858	mg/L	04.19.2019 13:36		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3900	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0130	0.00400	0.000246	mg/L	04.18.2019 22:24		1
Chromium	7440-47-3	3.25	0.200	0.0262	mg/L	04.19.2019 12:27	D	50
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:24	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:24	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.90	0.200	0.0545	mg/L	04.12.2019 17:30		20



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW058**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-008

Date Collected: 04.12.2019 14:20

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1150	5.00	0.858	mg/L	04.19.2019 13:44		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4180	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0127	0.00400	0.000246	mg/L	04.18.2019 22:27		1
Chromium	7440-47-3	3.16	0.200	0.0262	mg/L	04.19.2019 16:46	D	50
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:27	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:27	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.74	0.200	0.0545	mg/L	04.12.2019 17:30		20



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW057SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-001

Date Collected: 04.15.2019 08:24

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	357	5.00	0.858	mg/L	04.19.2019 13:37		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1500	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0124	0.00400	0.000246	mg/L	04.18.2019 22:30		1
Iron	7439-89-6	0.0850	0.100	0.0227	mg/L	04.18.2019 22:30	J	1
Manganese	7439-96-5	0.00340	0.00200	0.000199	mg/L	04.18.2019 22:30		1
Chromium	7440-47-3	0.0385	0.00400	0.000525	mg/L	04.18.2019 22:30		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0343	0.0100	0.00273	mg/L	04.16.2019 08:00		1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW043**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-002

Date Collected: 04.15.2019 08:53

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	843	10.0	1.72	mg/L	04.19.2019 13:57		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1840	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00504	0.00400	0.000246	mg/L	04.18.2019 22:33		1
Iron	7439-89-6	0.593	0.100	0.0227	mg/L	04.18.2019 22:33		1
Manganese	7439-96-5	0.573	0.00200	0.000199	mg/L	04.18.2019 22:33		1
Chromium	7440-47-3	0.000894	0.00400	0.000525	mg/L	04.18.2019 22:33	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW043**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-002

Date Collected: 04.15.2019 08:53

Date Received: 04.15.2019 16:57

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3087222

Date Prep: 04.27.2019 08:00

Prep seq: 7676726

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.27.2019 10:12	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.27.2019 10:12	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.27.2019 10:12	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.27.2019 10:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	102	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 06:32	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 06:32	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 06:32	U	1
m,p-Xylenes	179601-23-1	0.00131	0.00400	0.000630	mg/L	04.18.2019 06:32	J	1
o-Xylene	95-47-6	0.00103	0.00200	0.000642	mg/L	04.18.2019 06:32	J	1
Total Xylenes	1330-20-7	0.00234	0.00200	0.000630	mg/L	04.18.2019 06:32		1
Total BTEX		0.00234	0.00200	0.000367	mg/L	04.18.2019 06:32		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW050SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-003

Date Collected: 04.15.2019 09:06

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1420	25.0	4.29	mg/L	04.19.2019 14:03		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3500	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00854	0.00400	0.000246	mg/L	04.18.2019 22:36		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:36	U	1
Manganese	7439-96-5	0.0191	0.00200	0.000199	mg/L	04.18.2019 22:36		1
Chromium	7440-47-3	0.329	0.00400	0.000525	mg/L	04.18.2019 22:36		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.290	0.0100	0.00273	mg/L	04.16.2019 08:00		1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW051SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-004

Date Collected: 04.15.2019 09:24

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1220	25.0	4.29	mg/L	04.19.2019 14:10		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0126	0.00400	0.000246	mg/L	04.18.2019 22:39		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:39	U	1
Manganese	7439-96-5	0.00822	0.00200	0.000199	mg/L	04.18.2019 22:39		1
Chromium	7440-47-3	0.779	0.00400	0.000525	mg/L	04.18.2019 22:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.733	0.0500	0.0136	mg/L	04.16.2019 08:00		5



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW079SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-005

Date Collected: 04.15.2019 09:49

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	271	5.00	0.858	mg/L	04.19.2019 14:36		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1140	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00583	0.00400	0.000246	mg/L	04.18.2019 22:42		1
Iron	7439-89-6	0.581	0.100	0.0227	mg/L	04.18.2019 22:42		1
Manganese	7439-96-5	0.0511	0.00200	0.000199	mg/L	04.18.2019 22:42		1
Chromium	7440-47-3	0.00103	0.00400	0.000525	mg/L	04.18.2019 22:42	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW003**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-006

Date Collected: 04.15.2019 10:01

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	10.0	1.72	mg/L	04.19.2019 15:32		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2410	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0157	0.00400	0.000246	mg/L	04.18.2019 22:45		1
Iron	7439-89-6	5.02	0.100	0.0227	mg/L	04.18.2019 22:45		1
Manganese	7439-96-5	3.74	0.0400	0.00397	mg/L	05.02.2019 14:58	D	20
Chromium	7440-47-3	0.00880	0.00400	0.000525	mg/L	04.18.2019 22:45		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Grapeland, TX (409) 704-5440
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 6021180

Page 1 of 1

www.xencolab.com

Project Manager:	<u>Br H Krehbiel</u>	Bill to: (if different)	<u>NA</u>
Company Name:	<u>Alcadi's</u>	Company Name:	<u>NA</u>
Address:	<u>100 N. Big Spring St.</u>	Address:	<u>NA</u>
City, State ZIP:	<u>Midland, TX 79701</u>	City, State ZIP:	<u>NA</u>
Phone:	<u>916-786-5382</u>	Email:	<u>brh@krehbiel.com</u>

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

ANALYSIS REQUEST										Preservative Codes							
Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	MeOH: Me	None: NO	HNO3: HN	H2SO4: H2	HCL: HL	NaOH: Na	Zn Acetate+ NaOH: Zn	TAT starts the day received by the lab, if received by 4:00pm	Sample Comments	
MW023	W	W	4-15-19	1410	NA	3	1	Hex Chroma (Sw 2196A)	1	1	1	1	1	1	1	1	
MW059	W	W	4-15-19	1430	NA	3	1	Discolor (Sw 2196A)	1	1	1	1	1	1	1	1	
MW031	W	W	4-15-19	1450	NA	3	1	Discolor (Sw 2196A)	1	1	1	1	1	1	1	1	
MW069	W	W	4-15-19	1515	NA	3	1	Discolor (Sw 2196A)	1	1	1	1	1	1	1	1	
MW068	W	W	4-15-19	1537	NA	3	1	Discolor (Sw 2196A)	1	1	1	1	1	1	1	1	

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>[Signature]</u>	<u>[Signature]</u>	<u>4/15/19 / 1537</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>4/15/19 / 1537</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>4/15/19 / 1537</u>



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW023**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-001

Date Collected: 04.15.2019 14:10

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	860	25.0	4.29	mg/L	04.19.2019 14:43		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3150	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00878	0.00400	0.000246	mg/L	04.19.2019 21:10		1
Iron	7439-89-6	0.0352	0.100	0.0227	mg/L	04.19.2019 21:10	J	1
Manganese	7439-96-5	0.00488	0.00200	0.000199	mg/L	04.19.2019 21:10		1
Chromium	7440-47-3	2.22	0.0800	0.0105	mg/L	04.22.2019 13:37	Ø	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.07	0.100	0.0273	mg/L	04.16.2019 08:00		10



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW059**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-002

Date Collected: 04.15.2019 14:30

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	891	10.0	1.72	mg/L	04.19.2019 14:49		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2950	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0148	0.00400	0.000246	mg/L	04.19.2019 21:12		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 21:12	U	1
Manganese	7439-96-5	0.00107	0.00200	0.000199	mg/L	04.19.2019 21:12	J	1
Chromium	7440-47-3	0.460	0.00400	0.000525	mg/L	04.30.2019 20:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.401	0.0100	0.00273	mg/L	04.16.2019 08:00		1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW031**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-003

Date Collected: 04.15.2019 14:50

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	263	2.50	0.429	mg/L	04.19.2019 14:56		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	874	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0847	0.00400	0.000246	mg/L	04.19.2019 21:15		1
Iron	7439-89-6	3.36	0.100	0.0227	mg/L	04.19.2019 21:15		1
Manganese	7439-96-5	0.866	0.00200	0.000199	mg/L	04.19.2019 21:15		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 21:15	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW069**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-004

Date Collected: 04.15.2019 15:15

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	9650	50.0	8.58	mg/L	04.22.2019 10:12		100

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	14800	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0113	0.0200	0.00123	mg/L	04.22.2019 13:11	JD	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:11	UD	5
Manganese	7439-96-5	0.0902	0.0100	0.000993	mg/L	04.22.2019 13:11	D	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	04.22.2019 13:11	UD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW068**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-005

Date Collected: 04.15.2019 15:37

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	7100	25.0	4.29	mg/L	04.19.2019 15:25		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	10500	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0180	0.0200	0.00123	mg/L	04.22.2019 13:14	JD	5
Iron	7439-89-6	1.66	0.500	0.114	mg/L	04.22.2019 13:14	D	5
Manganese	7439-96-5	2.87	0.0100	0.000993	mg/L	04.22.2019 13:14	D	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	04.22.2019 13:14	UD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) El Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813)575-392-7550

Work Order No: 62298

www.xenco.com Page 7 of 2

Project Manager:	Brett Krehbiel	Bill to: (if different)
Company Name:	ARCADIS	Company Name:
Address:	1004 N. Big Spring St.	Address:
City, State ZIP:	Midland, TX. 79701	City, State ZIP:
Phone:	916-786-5392	Email: brett.krehbiel@arcadis.com

[illegible]

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		23.2			Thermometer ID		
Received Intact:		Yes	No				
Cooler Custody Seals:		Yes	No		Correction Factor:		
Sample Custody Seals:		Yes	No		Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	BTEX (S)	TPH (SV)	Hex Chn	Dissolve	TDS (SV)	Chloride				Sample Comments
MW095	W	4-16	0740		3			✓	✓	✓	✓				
MW060	W	4-16	0827		3			✓	✓	✓	✓				
MW061	W	4-16	0858		3			✓	✓	✓	✓				
MW044	W	4-16	0940		3			✓	✓	✓	✓				
MW032	W	4-16	0959		3			✓	✓	✓	✓				
MW027	W	4-16	1119		3			✓	✓	✓	✓				
MW026	W	4-16	1141		3			✓	✓	✓	✓				
MW015A	W	4-16	1203		3			✓	✓	✓	✓				
MW013	W	4-16	1220		3			✓	✓	✓	✓				
MW040A	W	4-16	1235		3			✓	✓	✓	✓				

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn			
Circle Method(s) and Metal(s) to be analyzed			TCLP / SPLP 6010: 8RCRA		Sb	As	Ba	Be	Cd	Cr <td>Co <td>Cu <td>Pb <td>Mn <td>Mo <td>Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td></td></td></td></td></td></td>	Co <td>Cu <td>Pb <td>Mn <td>Mo <td>Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td></td></td></td></td></td>	Cu <td>Pb <td>Mn <td>Mo <td>Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td></td></td></td></td>	Pb <td>Mn <td>Mo <td>Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td></td></td></td>	Mn <td>Mo <td>Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td></td></td>	Mo <td>Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td></td>	Ni <td>Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td></td>	Se <td>Ag <td>Ti <td>U <td colspan="16"></td> </td></td></td>	Ag <td>Ti <td>U <td colspan="16"></td> </td></td>	Ti <td>U <td colspan="16"></td> </td>	U <td colspan="16"></td>																
																					1631 / 245.1 / 7470 / 7471 : Hg															

Notice: Signature of this document constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/16/19 16:20			4/16/19 18:30
3			4		
5			6		



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW095**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-001

Date Collected: 04.16.2019 07:40

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1500	25.0	4.29	mg/L	04.19.2019 15:51		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3760	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00930	0.00400	0.000246	mg/L	04.19.2019 18:22		1
Chromium	7440-47-3	3.77	0.0800	0.0105	mg/L	04.22.2019 17:33	DX	20
Iron	7439-89-6	0.242	0.100	0.0227	mg/L	04.19.2019 18:22		1
Manganese	7439-96-5	0.147	0.00200	0.000199	mg/L	04.19.2019 18:22		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.46	0.100	0.0273	mg/L	04.17.2019 07:15	J	10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW060**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-002

Date Collected: 04.16.2019 08:27

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1670	25.0	4.29	mg/L	04.19.2019 15:58		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3390	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00265	0.00400	0.000246	mg/L	04.19.2019 18:42	J	1
Chromium	7440-47-3	0.00195	0.00400	0.000525	mg/L	04.19.2019 18:42	J	1
Iron	7439-89-6	0.796	0.100	0.0227	mg/L	04.19.2019 18:42		1
Manganese	7439-96-5	12.5	0.200	0.0199	mg/L	04.22.2019 17:36	Ø	100

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	UX UJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW061**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-003

Date Collected: 04.16.2019 08:58

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1180	25.0	4.29	mg/L	04.19.2019 16:04		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3980	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0114	0.00400	0.000246	mg/L	04.19.2019 18:44		1
Chromium	7440-47-3	1.38	0.00400	0.000525	mg/L	04.19.2019 18:44		1
Iron	7439-89-6	0.0231	0.100	0.0227	mg/L	04.19.2019 18:44	J	1
Manganese	7439-96-5	0.0246	0.00200	0.000199	mg/L	04.19.2019 18:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.51	0.100	0.0273	mg/L	04.17.2019 07:15	J	10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW094**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-004

Date Collected: 04.16.2019 09:40

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1070	25.0	4.29	mg/L	04.19.2019 16:11		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3860	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0108	0.00400	0.000246	mg/L	04.19.2019 18:47		1
Chromium	7440-47-3	1.53	0.00400	0.000525	mg/L	04.19.2019 18:47		1
Iron	7439-89-6	0.134	0.100	0.0227	mg/L	04.19.2019 18:47		1
Manganese	7439-96-5	0.0141	0.00200	0.000199	mg/L	04.19.2019 18:47		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.88	0.100	0.0273	mg/L	04.17.2019 07:15	J	10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW032**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-005

Date Collected: 04.16.2019 09:59

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	386	5.00	0.858	mg/L	04.19.2019 16:18		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1340	5.00	5.00	mg/L	04.19.2019 15:00	J	1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00370	0.00400	0.000246	mg/L	04.19.2019 18:50	J	1
Chromium	7440-47-3	0.00473	0.00400	0.000525	mg/L	04.19.2019 18:50		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 18:50	U	1
Manganese	7439-96-5	0.00172	0.00200	0.000199	mg/L	04.19.2019 18:50	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U UJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW027**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-006

Date Collected: 04.16.2019 11:19

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	367	5.00	0.858	mg/L	04.19.2019 16:37		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1550	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00653	0.00400	0.000246	mg/L	04.19.2019 18:53		1
Chromium	7440-47-3	0.00139	0.00400	0.000525	mg/L	04.19.2019 18:53	J	1
Iron	7439-89-6	0.0457	0.100	0.0227	mg/L	04.19.2019 18:53	J	1
Manganese	7439-96-5	0.00129	0.00200	0.000199	mg/L	04.19.2019 18:53	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	UJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW026**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-007

Date Collected: 04.16.2019 11:41

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	104	2.50	0.429	mg/L	04.19.2019 16:44		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	696	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00768	0.00400	0.000246	mg/L	04.19.2019 18:56		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 18:56	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 18:56	U	1
Manganese	7439-96-5	0.000977	0.00200	0.000199	mg/L	04.19.2019 18:56	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U UJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW015A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-008

Date Collected: 04.16.2019 12:03

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	4250	25.0	4.29	mg/L	04.19.2019 16:50		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	6120	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0136	0.0200	0.00123	mg/L	04.22.2019 17:39	JD J	5
Chromium	7440-47-3	0.00983	0.0200	0.00262	mg/L	04.22.2019 17:39	JD J	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 17:39	UD U	5
Manganese	7439-96-5	0.00203	0.0100	0.000993	mg/L	04.22.2019 17:39	JD J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U JJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW013**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-009

Date Collected: 04.16.2019 12:20

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	859	10.0	1.72	mg/L	04.19.2019 16:57		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2940	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00809	0.00400	0.000246	mg/L	04.19.2019 19:02		1
Chromium	7440-47-3	2.54	0.0800	0.0105	mg/L	04.22.2019 17:42	ⓓ	20
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 19:02	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.19.2019 19:02	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.22	0.100	0.0273	mg/L	04.17.2019 07:15	J	10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW040A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-010

Date Collected: 04.16.2019 12:35

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	56.4	2.50	0.429	mg/L	04.23.2019 13:27		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	481	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0203	0.00400	0.000246	mg/L	04.19.2019 19:05		1
Chromium	7440-47-3	0.00285	0.00400	0.000525	mg/L	04.19.2019 19:05	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 19:05	U	1
Manganese	7439-96-5	0.000271	0.00200	0.000199	mg/L	04.19.2019 19:05	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U UJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW010**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-011

Date Collected: 04.16.2019 12:49

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2380	25.0	4.29	mg/L	04.23.2019 13:46		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4160	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00885	0.0200	0.00123	mg/L	04.22.2019 17:45	JD J	5
Chromium	7440-47-3	0.0273	0.0200	0.00262	mg/L	04.22.2019 17:45	DB	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 17:45	UD U	5
Manganese	7439-96-5	<0.000993	0.0100	0.000993	mg/L	04.22.2019 17:45	UD U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0213	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW037**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-012

Date Collected: 04.16.2019 13:03

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	405	5.00	0.858	mg/L	04.23.2019 13:52		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1320	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0546	0.00400	0.000246	mg/L	04.19.2019 19:16		1
Chromium	7440-47-3	0.00116	0.00400	0.000525	mg/L	04.19.2019 19:16	J	1
Iron	7439-89-6	8.05	0.100	0.0227	mg/L	04.19.2019 19:16		1
Manganese	7439-96-5	0.0493	0.00200	0.000199	mg/L	04.19.2019 19:16		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	UJ	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW037**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-012

Date Collected: 04.16.2019 13:03

Date Received: 04.16.2019 18:30

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	3.22	1.50	0.987	mg/L	04.17.2019 16:33		1
Diesel Range Organics	C10C28DRO	2.87	1.50	0.911	mg/L	04.17.2019 16:33		1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 16:33	U	1
Total TPH	PHC635	6.09	1.50	0.911	mg/L	04.17.2019 16:33		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	102	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.719	0.0200	0.00408	mg/L	04.18.2019 10:32	D	10
Toluene	108-88-3	0.000390	0.00200	0.000367	mg/L	04.18.2019 15:43	J	1
Ethylbenzene	100-41-4	0.134	0.00200	0.000657	mg/L	04.18.2019 15:43		1
m,p-Xylenes	179601-23-1	0.00150	0.00400	0.000630	mg/L	04.18.2019 15:43	J	1
o-Xylene	95-47-6	0.00122	0.00200	0.000642	mg/L	04.18.2019 15:43	J	1
Total Xylenes	1330-20-7	0.00272	0.00200	0.000630	mg/L	04.18.2019 15:43		1
Total BTEX		0.856	0.00200	0.000367	mg/L	04.18.2019 10:32		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW004A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-013

Date Collected: 04.16.2019 13:34

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	550	10.0	1.72	mg/L	04.23.2019 13:58		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1080	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0156	0.00400	0.000246	mg/L	04.22.2019 18:05		1
Chromium	7440-47-3	0.558	0.00400	0.000525	mg/L	04.22.2019 18:05		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.22.2019 18:05	U	1
Manganese	7439-96-5	0.000551	0.00200	0.000199	mg/L	04.22.2019 18:05	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.459	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW024**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-014

Date Collected: 04.16.2019 13:53

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	817	25.0	4.29	mg/L	04.23.2019 14:05		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4350	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0113	0.00400	0.000246	mg/L	04.22.2019 18:08		1
Chromium	7440-47-3	1.21	0.00400	0.000525	mg/L	04.22.2019 18:08		1
Iron	7439-89-6	0.321	0.100	0.0227	mg/L	04.22.2019 18:08		1
Manganese	7439-96-5	0.0288	0.00200	0.000199	mg/L	04.22.2019 18:08		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.02	0.0500	0.0136	mg/L	04.17.2019 07:15		5



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP04**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-015

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	374	5.00	0.858	mg/L	04.23.2019 14:24		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	372	5.00	5.00	mg/L	04.19.2019 15:00	J	1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00315	0.00400	0.000246	mg/L	04.19.2019 19:25	J	1
Chromium	7440-47-3	0.00505	0.00400	0.000525	mg/L	04.19.2019 19:25		1
Iron	7439-89-6	0.0230	0.100	0.0227	mg/L	04.19.2019 19:25	J	1
Manganese	7439-96-5	0.00127	0.00200	0.000199	mg/L	04.19.2019 19:25	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	UK U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP07**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-016

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1410	25.0	4.29	mg/L	04.23.2019 14:30		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5320	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00823	0.00400	0.000246	mg/L	04.19.2019 19:28		1
Chromium	7440-47-3	3.97	0.0800	0.0105	mg/L	04.22.2019 17:54	ⓓ	20
Iron	7439-89-6	0.239	0.100	0.0227	mg/L	04.19.2019 19:28		1
Manganese	7439-96-5	0.126	0.00200	0.000199	mg/L	04.19.2019 19:28		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.54	0.100	0.0273	mg/L	04.17.2019 07:15	ⓓ	10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **3086370-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086370-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1

Sample Id: **3086371-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086371-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1

Sample Id: **3086376-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086376-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	6.00	5.00	5.00	mg/L	04.19.2019 15:00	B	1

Sample Id: **3086383-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086383-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	04.19.2019 15:00	U	1



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Work Order No: 0730

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com Page 1 of 7

Project Manager:	Brett Krehbiel	Bill to: (if different)
Company Name:	ARCADIS	Company Name:
Address:	1004 N. Big Spring St.	Address:
City, State ZIP:	Midland, TX. 79701	City, State ZIP:
Phone:	916-786-5382	Email: brett.krehbiel@arcadis.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Eunice Project-N. Eunice		Turn Around	
Project Number:		30048789		Routine ☒	
P.O. Number:		30048785		Rush:	
Sampler's Name:		Terry Sibongwe		Due Date:	
SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒
Temperature (°C):		23/2.2			
Received Intact:		Thermometer ID			
Cooler Custody Seals:		Yes ☒ No ☐			
Sample Custody Seals:		Correction Factor: -0.1			
		Total Containers:			
		Yes ☐ No ☒			
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth
mw0548A		W	04/06/19	0749	
mw0525A		W	4/16/19	0816	
mw0495A		W	4/16/19	0831	
mw0485A		W	4/16/19	0843	
mw041A		W	4/16/19	0859	
mw019		W	4/16/19	0944	
mw0935A		W	4/16/19	1123	
mw023		W	4/16/19	1210	
mw020A		W	4/16/19	1229	
DUP01		W	4/16/19		

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Tl	Sn	U	V	Zn		
Circle Method(s) and Metal(s) to be analyzed			TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg																													

Notice: Signature of this document constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. Tracy S. Hongswell	Tracy S. Hongswell	4/16/19 16:20	Tracy S. Hongswell	Tracy S. Hongswell	4/16/19 18:30
3					
5					
6					



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No: 621300

www.xenco.com Page 1 of 2

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Project Name:	Eunice Project-N. Eunice	Turn Around	
Project Number:	30048789	Routine	☒
P.O. Number:	30048789	Rush:	
Sampler's Name:	Derry Schenwald	Due Date:	

SAMPLE RECEIPT				ANALYSIS REQUEST				Work Order Notes															
Temperature (°C):	Temp Blank:	Yes	No	Temp Blank:	Yes	No	Temp Blank:	Yes	No	TAT starts the day received by the lab, if received by 4:30pm													
Received Intact:	Yes	No	Thermometer ID	Yes	No	Thermometer ID	Yes	No															
Cooler Custody Seals:	Yes	No	Correction Factor:	Yes	No	Correction Factor:	Yes	No															
Sample Custody Seals:	Yes	No	Total Containers:	Yes	No	Total Containers:	Yes	No															
Sample Identification				Number of Containers				Sample Comments															
MW019A				43				Chlorides (E300)															
MW019B				3								TDS (SW2540)											
MW019C				3												Dissolved Metals (SW6020-DIS): Arsenic, Manganese, Iron & Chromium							
MW019D				3																Hex Chrome (SW7196A)			
MW019E				3																			
MW019F				3				BTX (SW8021)															
MW019G				3																			
MW019H				3																			
MW019I				3																			
MW019J				3																			
MW019K				3																			
MW019L				3																			
MW019M				3																			
MW019N				3																			
MW019O				3																			
MW019P				3																			
MW019Q				3																			
MW019R				3																			
MW019S				3																			
MW019T				3																			
MW019U				3																			
MW019V				3																			
MW019W				3																			
MW019X				3																			
MW019Y				3																			
MW019Z				3																			
MW020A				3																			
MW020B				3																			
MW020C				3																			
MW020D				3																			
MW020E				3																			
MW020F				3																			
MW020G				3																			
MW020H				3																			
MW020I				3																			
MW020J				3																			
MW020K				3																			
MW020L				3																			
MW020M				3																			
MW020N				3																			
MW020O				3																			
MW020P				3																			
MW020Q				3																			
MW020R				3																			
MW020S				3																			
MW020T				3																			
MW020U				3																			
MW020V				3																			
MW020W				3																			
MW020X				3																			
MW020Y				3																			
MW020Z				3																			
MW021A				3																			
MW021B				3																			
MW021C				3																			
MW021D				3																			
MW021E				3																			
MW021F				3																			
MW021G				3																			
MW021H				3																			
MW021I				3																			
MW021J				3																			
MW021K				3																			
MW021L				3																			
MW021M				3																			
MW021N				3																			
MW021O				3																			
MW021P				3																			
MW021Q				3																			
MW021R				3																			
MW021S				3																			
MW021T				3																			
MW021U				3																			
MW021V				3																			
MW021W				3																			
MW021X				3																			
MW021Y				3																			
MW021Z				3																			
MW022A				3																			
MW022B				3																			
MW022C				3																			
MW022D				3																			
MW022E				3																			
MW022F				3																			
MW022G				3																			
MW022H				3																			
MW022I				3																			
MW022J				3																			
MW022K				3																			
MW022L				3																			
MW022M				3																			
MW022N				3																			
MW022O				3																			
MW022P				3																			
MW022Q				3																			
MW022R				3																			
MW022S				3																			
MW022T				3																			
MW022U				3																			
MW022V				3																			
MW022W				3																			
MW022X				3																			
MW022Y				3																			
MW022Z				3																			
MW023A				3																			
MW023B				3																			
MW023C				3																			
MW023D				3																			
MW023E				3																			
MW023F				3																			
MW023G				3																			
MW023H				3																			
MW023I				3																			
MW023J				3																			
MW023K				3																			
MW023L				3																			
MW023M				3																			
MW023N				3																			
MW023O				3																			
MW023P				3																			
MW023Q				3																			
MW023R				3																			
MW023S				3																			
MW023T				3																			
MW023U				3																			
MW023V				3																			
MW023W				3																			
MW023X				3																			
MW023Y				3																			
MW023Z				3																			
MW024A				3																			
MW024B				3																			
MW024C				3																			
MW024D				3																			
MW024E				3																			
MW024F				3																			
MW024G				3																			
MW024H				3																			
MW024I				3																			
MW024J				3																			
MW024K				3																			
MW024L				3																			
MW024M				3																			
MW024N				3																			
MW024O				3																			
MW024P				3																			
MW024Q				3																			
MW024R				3																			
MW024S				3																			
MW024T				3																			
MW024U				3																			
MW024V				3																			
MW024W				3																			
MW024X				3																			
MW024Y				3																			
MW024Z				3																			
MW025A				3																			
MW025B				3																			
MW025C				3																			
MW025D				3																			
MW025E				3																			
MW025F				3																			
MW025G				3																			
MW025H				3																			
MW025I				3																			
MW025J				3																			
MW025K				3																			
MW025L				3																			
MW025M				3																			
MW025N				3																			
MW025O				3																			
MW025P				3																			
MW025Q				3																			
MW025R				3																			
MW025S				3																			
MW025T				3																			
MW025U				3																			
MW025V				3																			
MW025W				3																			
MW025X				3																			
MW025Y				3																			
MW025Z				3																			
MW026A				3																			
MW026B				3																			
MW026C				3																			
MW026D				3																			
MW026E				3																			
MW026F				3																			
MW026G				3																			
MW026H				3																			
MW026I				3																			
MW026J				3																			
MW026K				3																			
MW026L				3																			
MW026M				3																			
MW026N				3																			
MW026O				3																			
MW026P				3																			
MW026Q				3																			
MW026R				3																			
MW026S				3																			
MW026T				3																			
MW026U				3																			
MW026V				3																			
MW026W				3																			
MW026X				3																			
MW026Y				3																			
MW026Z				3																			
MW027A				3																			
MW027B				3																			
MW027C				3																			
MW027D				3																			
MW027E				3																			
MW027F				3																			
MW027G				3																			
MW027H				3																			
MW027I				3																			
MW027J				3																			
MW027K				3																			
MW027L				3																			
MW027M				3																			
MW027N				3																			
MW027O				3																			
MW027P				3																			
MW027Q				3																			
MW027R				3																			
MW027S				3																			
MW027T				3																			
MW027U				3																			
MW027V				3																			
MW027W				3																			
MW027X				3																			
MW027Y				3																			
MW027Z				3																			
MW028A				3																			
MW028B				3																			
MW028C				3																			
MW028D				3																			
MW028E				3																			
MW028F				3																			
MW028G				3																			
MW028H				3																			
MW028I				3																			
MW028J				3																			
MW028K				3																			
MW028L				3																			
MW028M				3																			
MW028N				3																			
MW028O				3																			
MW028P				3																			
MW028Q				3																			
MW028R				3																			
MW028S				3																			
MW028T				3																			
MW028U				3																			
MW028V				3																			
MW028W				3																			
MW028X				3																			
MW028Y				3																			
MW028Z				3																			
MW029A				3																			
MW029B				3																			
MW029C				3																			
MW029D				3																			
MW029E				3																			
MW029F				3																			
MW029G				3																			
MW029H				3																			
MW029I				3																			
MW029J				3																			
MW029K				3																			
MW029L				3																			
MW029M				3																			
MW029N				3																			
MW029O				3																			
MW029P				3																			
MW029Q				3																			
MW029R				3																			
MW029S				3																			
MW029T				3																			
MW029U				3																			
MW029V				3																			
MW029W				3																			
MW029X				3																			
MW029Y				3																			
MW029Z				3																			
MW030A				3																			
MW030B				3																			
MW030C				3																			
MW030D				3																			
MW030E				3																			
MW030F				3																			
MW030G				3																			
MW030H				3																			
MW030I				3																			
MW030J				3																			
MW030K				3																			
MW030L				3																			
MW030M				3																			
MW030N				3																			
MW030O				3																			
MW030P				3																			



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW054SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-001

Date Collected: 04.16.2019 07:49

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	951	10.0	1.72	mg/L	04.23.2019 14:36		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1910	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	04.19.2019 21:24		1
Chromium	7440-47-3	0.122	0.00400	0.000525	mg/L	04.19.2019 21:24		1
Iron	7439-89-6	0.227	0.100	0.0227	mg/L	04.19.2019 21:24		1
Manganese	7439-96-5	0.00730	0.00200	0.000199	mg/L	04.19.2019 21:24		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.117	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW052SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-002

Date Collected: 04.16.2019 08:16

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1590	25.0	4.29	mg/L	04.23.2019 14:43		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3060	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0138	0.00400	0.000246	mg/L	04.19.2019 21:27		1
Chromium	7440-47-3	0.246	0.00400	0.000525	mg/L	04.19.2019 21:27		1
Iron	7439-89-6	0.110	0.100	0.0227	mg/L	04.19.2019 21:27		1
Manganese	7439-96-5	0.00376	0.00200	0.000199	mg/L	04.19.2019 21:27		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.224	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW049SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-003

Date Collected: 04.16.2019 08:31

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1320	25.0	4.29	mg/L	04.23.2019 14:49		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2530	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0125	0.0200	0.00123	mg/L	04.22.2019 13:17	~~ID~~ J	5
Chromium	7440-47-3	0.200	0.0200	0.00262	mg/L	04.22.2019 13:17	~~ID~~ D	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:17	~~UD~~ U	5
Manganese	7439-96-5	<0.000993	0.0100	0.000993	mg/L	04.22.2019 13:17	~~UD~~ U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.176	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW048SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-004

Date Collected: 04.16.2019 08:43

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	607	10.0	1.72	mg/L	04.23.2019 14:55		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1860	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0121	0.00400	0.000246	mg/L	04.19.2019 21:33		1
Chromium	7440-47-3	0.396	0.00400	0.000525	mg/L	04.19.2019 21:33		1
Iron	7439-89-6	0.0259	0.100	0.0227	mg/L	04.19.2019 21:33	J	1
Manganese	7439-96-5	0.00124	0.00200	0.000199	mg/L	04.19.2019 21:33	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.363	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW041A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-005

Date Collected: 04.16.2019 08:59

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	461	5.00	0.858	mg/L	04.23.2019 15:14		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1530	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0104	0.00400	0.000246	mg/L	04.19.2019 21:36		1
Chromium	7440-47-3	0.201	0.00400	0.000525	mg/L	04.19.2019 21:36		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 21:36	U	1
Manganese	7439-96-5	0.00107	0.00200	0.000199	mg/L	04.19.2019 21:36	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.175	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **IW019**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-006

Date Collected: 04.16.2019 09:44

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	25.0	4.29	mg/L	04.23.2019 15:21	J	50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3310	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00987	0.00400	0.000246	mg/L	04.19.2019 21:45		1
Chromium	7440-47-3	0.672	0.0200	0.00262	mg/L	04.23.2019 16:58	D	5
Iron	7439-89-6	0.0721	0.100	0.0227	mg/L	04.19.2019 21:45	J	1
Manganese	7439-96-5	0.139	0.00200	0.000199	mg/L	04.19.2019 21:45		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.664	0.0500	0.0136	mg/L	04.17.2019 08:31		5



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **IW019**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-006

Date Collected: 04.16.2019 09:44

Date Received: 04.16.2019 18:30

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.17.2019 16:53	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.17.2019 16:53	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 16:53	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.17.2019 16:53	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 08:30	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:30	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 08:30	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 08:30	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 08:30	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 08:30	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:30	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	113	70 - 130	%		



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW093SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-007

Date Collected: 04.16.2019 11:23

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	984	25.0	4.29	mg/L	04.23.2019 15:40		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3220	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00811	0.00400	0.000246	mg/L	04.19.2019 21:48		1
Chromium	7440-47-3	0.405	0.00400	0.000525	mg/L	04.19.2019 21:48		1
Iron	7439-89-6	0.0483	0.100	0.0227	mg/L	04.19.2019 21:48	J	1
Manganese	7439-96-5	0.244	0.00200	0.000199	mg/L	04.19.2019 21:48		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.365	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **IW023**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-008

Date Collected: 04.16.2019 12:10

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	765	10.0	1.72	mg/L	04.23.2019 15:46		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2790	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00961	0.00400	0.000246	mg/L	04.19.2019 21:51		1
Chromium	7440-47-3	0.345	0.00400	0.000525	mg/L	04.19.2019 21:51		1
Iron	7439-89-6	0.0487	0.100	0.0227	mg/L	04.19.2019 21:51	J	1
Manganese	7439-96-5	0.00282	0.00200	0.000199	mg/L	04.19.2019 21:51		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.315	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW020A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-009

Date Collected: 04.16.2019 12:29

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1320	10.0	1.72	mg/L	04.23.2019 15:53		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2180	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0111	0.0200	0.00123	mg/L	04.22.2019 13:20	JD J	5
Chromium	7440-47-3	0.00560	0.0200	0.00262	mg/L	04.22.2019 13:20	JD J	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:20	UD U	5
Manganese	7439-96-5	0.00112	0.0100	0.000993	mg/L	04.22.2019 13:20	JD J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP01**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-010

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	361	25.0	4.29	mg/L	04.23.2019 15:59	J	50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3190	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.0200	0.00123	mg/L	04.22.2019 13:22	JD	J 5
Chromium	7440-47-3	0.736	0.0200	0.00262	mg/L	04.22.2019 13:22	D	D 5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:22	UD	U 5
Manganese	7439-96-5	0.105	0.0100	0.000993	mg/L	04.22.2019 13:22	D	D 5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.698	0.0500	0.0136	mg/L	04.17.2019 08:31	K	5



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP01**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-010

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.17.2019 17:12	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.17.2019 17:12	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 17:12	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.17.2019 17:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 08:50	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:50	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 08:50	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 08:50	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 08:50	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 08:50	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:50	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	111	70 - 130	%		



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW019A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-011

Date Collected: 04.16.2019 12:55

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	303	5.00	0.858	mg/L	04.23.2019 16:05		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1110	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00627	0.00400	0.000246	mg/L	04.19.2019 21:59		1
Chromium	7440-47-3	0.000853	0.00400	0.000525	mg/L	04.19.2019 21:59	J	1
Iron	7439-89-6	0.0538	0.100	0.0227	mg/L	04.19.2019 21:59	J	1
Manganese	7439-96-5	0.0179	0.00200	0.000199	mg/L	04.19.2019 21:59		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW018**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-012

Date Collected: 04.16.2019 13:17

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	455	5.00	0.858	mg/L	04.23.2019 16:12		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0124	0.00400	0.000246	mg/L	04.19.2019 22:02		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 22:02	U	1
Iron	7439-89-6	0.0574	0.100	0.0227	mg/L	04.19.2019 22:02	J	1
Manganese	7439-96-5	0.00194	0.00200	0.000199	mg/L	04.19.2019 22:02	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW097P**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-013

Date Collected: 04.16.2019 13:45

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1010	25.0	4.29	mg/L	04.23.2019 16:18		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3480	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0111	0.0200	0.00123	mg/L	04.22.2019 13:25	J	5
Chromium	7440-47-3	0.479	0.0200	0.00262	mg/L	04.22.2019 13:25	D	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:25	UD	5
Manganese	7439-96-5	0.0557	0.0100	0.000993	mg/L	04.22.2019 13:25	D	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.360	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP03**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-014

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	10.0	1.72	mg/L	04.23.2019 16:37		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2140	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.0200	0.00123	mg/L	04.22.2019 13:34	JD	5
Chromium	7440-47-3	0.00511	0.0200	0.00262	mg/L	04.22.2019 13:34	JD	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:34	UD	5
Manganese	7439-96-5	0.00123	0.0100	0.000993	mg/L	04.22.2019 13:34	JD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	UK	1



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Project Name:	Eunice Project-N. Eunice	Turn Around	
Project Number:		Routine ☒	
P.O. Number:		Rush:	
Sampler's Name:	Chas Holder	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
	Thermometer ID					
	Received Intact:	Yes	No	Correction Factor:		
	Cooler Custody Seals:	Yes	No	N/A		
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
MW001A MW090 SA	W	4-17	0746	83
MW089 SA	W	4-17	0800	3
MW007 A	W	4-17	0816	3
MW047	W	4-17	0833	3
MW001	W	4-17	0853	8
MW002A	W	4-17	0922	3
MW046 A	W	4-17	0950	8
MW045	W	4-17	1008	8
MW012M	W	4-17	1218	3
MW088M	W	4-17	1229	3

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

(Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	4/17/19 16:48	<i>[Signature]</i>	<i>[Signature]</i>	4/17/19 19:00
3			4		
5			6		

Work Order No: 021481
 www.xenco.com Page 1 of 2

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

ANALYSIS REQUEST										Work Order Notes	
Number of Containers	BTEX (SW8021)	TPH (SW8015)	Hex Chrome (SW1396A)	Dissolved Metals (SW6020 DIS): Arsenic, Manganese, Iron & Chromium	TDS (SW2540)	Chlorides (E300)					
83	✓	✓	✓	✓	✓	✓					
3	✓	✓	✓	✓	✓	✓					
3	✓	✓	✓	✓	✓	✓					
3	✓	✓	✓	✓	✓	✓					
8	✓	✓	✓	✓	✓	✓					
3	✓	✓	✓	✓	✓	✓					
8	✓	✓	✓	✓	✓	✓					
8	✓	✓	✓	✓	✓	✓					
3	✓	✓	✓	✓	✓	✓					
3	✓	✓	✓	✓	✓	✓					

TAT starts the day received by the lab, if received by 4:30pm

Sample Comments



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1286
Hobbs NM (575-392-7550) Phoenix AZ (480-355-0900) Atlanta GA (770-448-9800) Tempe El / 814-

Work Order No.:

www.xenco.com Page 2 of 2

20-2000) www.xenoco.com Page 2 of 2

Work Order Comments

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ JRC ☐ Superfund ☐

State of Project:

Reporting: ☐ Level I ☐ Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: ☐ EDO ☐ ADAPT ☐ Other: _____

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Project Name: Eunice Project-N. Eunice		Turn Around	
Project Number:		Routine ☒	
P.O. Number:		Rush:	
Sampler's Name: Chris Holder		Due Date:	
SAMPLE RECEIPT		Temp Blank:	Yes No
Temperature (°C):		Wet Ice:	Yes No
Received Intact:		Thermometer ID	
Cooler Custody Seals:		Yes No	
Sample Custody Seals:		Yes No	
		Correction Factor:	
		Total Containers:	
Sample Identification		Matrix	Date Sampled
MW087A		W	4-17 1246
MW008M		W	4-17 1257
MW011A		W	4-17 1313
MW057SA		W	4-17 1334
Dup 05		W	4-17 —

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. Assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if any losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each collect and a charge of \$5.00 for each sample is included. These amounts will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/17/19 16:48			4/17/19 16:48



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW090SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-001

Date Collected: 04.17.2019 07:46

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	520	10.0	1.72	mg/L	04.23.2019 16:44		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2210	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00960	0.00400	0.000246	mg/L	04.24.2019 12:26		1
Chromium	7440-47-3	0.265	0.00400	0.000525	mg/L	04.26.2019 21:48		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 12:26	U	1
Manganese	7439-96-5	0.000728	0.00200	0.000199	mg/L	04.24.2019 12:26	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.310	0.0100	0.00273	mg/L	04.18.2019 08:01	K	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW089SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-002

Date Collected: 04.17.2019 08:00

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	934	25.0	4.29	mg/L	04.23.2019 16:51		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4260	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0107	0.00400	0.000246	mg/L	04.24.2019 13:07		1
Chromium	7440-47-3	1.10	0.0400	0.00525	mg/L	04.24.2019 14:05	D	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:05	UD	10
Manganese	7439-96-5	0.00835	0.00200	0.000199	mg/L	04.24.2019 13:07		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.06	0.200	0.0545	mg/L	04.18.2019 08:01	K	20



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW007A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-003

Date Collected: 04.17.2019 08:16

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	792	10.0	1.72	mg/L	04.23.2019 17:16		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3350	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	04.24.2019 13:10		1
Chromium	7440-47-3	0.711	0.0400	0.00525	mg/L	04.24.2019 14:08	D	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:08	UD	10
Manganese	7439-96-5	0.000644	0.00200	0.000199	mg/L	04.24.2019 13:10	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.660	0.200	0.0545	mg/L	04.18.2019 08:01		20



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW047**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-004

Date Collected: 04.17.2019 08:32

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	272	5.00	0.858	mg/L	04.23.2019 17:40		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	968	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	04.24.2019 13:12		1
Chromium	7440-47-3	0.0809	0.00400	0.000525	mg/L	04.24.2019 13:12		1
Iron	7439-89-6	0.0228	0.100	0.0227	mg/L	04.24.2019 16:50	J	1
Manganese	7439-96-5	0.000519	0.00200	0.000199	mg/L	04.24.2019 13:12	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0709	0.0100	0.00273	mg/L	04.18.2019 08:01		1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW001**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-005

Date Collected: 04.17.2019 08:53

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	451	10.0	1.72	mg/L	04.23.2019 17:47		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2570	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00174	0.00400	0.000246	mg/L	04.24.2019 13:15	J	1
Chromium	7440-47-3	0.00142	0.00400	0.000525	mg/L	04.24.2019 13:15	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 16:53	U	1
Manganese	7439-96-5	0.858	0.00200	0.000199	mg/L	04.24.2019 13:15		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW001**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-005

Date Collected: 04.17.2019 08:53

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.21.2019 09:50	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 09:50	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 09:50	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 09:50	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 20:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 20:01	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 20:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 20:01	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 20:01	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:01	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW002A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-006

Date Collected: 04.17.2019 09:22

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1430	25.0	4.29	mg/L	04.23.2019 17:55		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3420	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0193	0.00400	0.000246	mg/L	04.24.2019 13:18		1
Chromium	7440-47-3	0.889	0.0400	0.00525	mg/L	04.24.2019 14:11	ⓓ	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:11	UD	10
Manganese	7439-96-5	0.0201	0.00200	0.000199	mg/L	04.24.2019 13:18		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00890	0.0100	0.00273	mg/L	04.18.2019 08:01	J	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW046A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-007

Date Collected: 04.17.2019 09:50

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	745	10.0	1.72	mg/L	04.23.2019 18:02		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3260	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	04.24.2019 13:21		1
Chromium	7440-47-3	1.49	0.0400	0.00525	mg/L	04.24.2019 14:13	Ⓚ	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:13	UD	10
Manganese	7439-96-5	0.00333	0.00200	0.000199	mg/L	04.24.2019 13:21		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.73	0.200	0.0545	mg/L	04.18.2019 08:01		20



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW046A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-007

Date Collected: 04.17.2019 09:50

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	04.21.2019 10:48	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 10:48	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 10:48	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 10:48	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 20:20	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:20	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 20:20	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 20:20	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 20:20	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 20:20	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:20	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW045**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-008

Date Collected: 04.17.2019 10:08

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	76.0	5.00	0.858	mg/L	04.23.2019 18:09		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1460	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00232	0.00400	0.000246	mg/L	04.24.2019 13:24	J	1
Chromium	7440-47-3	0.0120	0.00400	0.000525	mg/L	04.24.2019 13:24		1
Iron	7439-89-6	0.0767	0.100	0.0227	mg/L	04.24.2019 17:02	J	1
Manganese	7439-96-5	0.0782	0.00200	0.000199	mg/L	04.24.2019 13:24		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW045**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-008

Date Collected: 04.17.2019 10:08

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	04.21.2019 11:08	U	1
Diesel Range Organics	C10C28DRO	<0.912	1.50	0.912	mg/L	04.21.2019 11:08	U	1
Oil Range Hydrocarbons	PHCG2835	<0.912	1.50	0.912	mg/L	04.21.2019 11:08	U	1
Total TPH	PHC635	<0.912	1.50	0.912	mg/L	04.21.2019 11:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	101	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 19:41	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 19:41	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 19:41	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 19:41	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 19:41	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 19:41	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 19:41	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW012M**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-009

Date Collected: 04.17.2019 12:18

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	800	25.0	4.29	mg/L	04.23.2019 18:41		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3130	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0652	0.00400	0.000246	mg/L	04.24.2019 13:27		1
Chromium	7440-47-3	0.0306	0.00400	0.000525	mg/L	04.24.2019 13:27		1
Iron	7439-89-6	3.94	0.100	0.0227	mg/L	04.24.2019 16:39		1
Manganese	7439-96-5	0.0507	0.00200	0.000199	mg/L	04.24.2019 13:27		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW088M**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-010

Date Collected: 04.17.2019 12:29

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	957	25.0	4.29	mg/L	04.23.2019 18:49		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3690	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0217	0.00400	0.000246	mg/L	04.24.2019 13:29		1
Chromium	7440-47-3	0.138	0.00400	0.000525	mg/L	04.24.2019 13:29		1
Iron	7439-89-6	1.72	2.00	0.455	mg/L	04.24.2019 13:59	JD J	20
Manganese	7439-96-5	1.26	0.0400	0.00397	mg/L	04.24.2019 13:59	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW087A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-011

Date Collected: 04.17.2019 12:46

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1190	25.0	4.29	mg/L	04.23.2019 19:13		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3840	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00120	0.00400	0.000246	mg/L	04.24.2019 13:38	J	1
Chromium	7440-47-3	0.0423	0.00400	0.000525	mg/L	04.24.2019 13:38		1
Iron	7439-89-6	3.56	0.100	0.0227	mg/L	04.24.2019 17:10		1
Manganese	7439-96-5	0.185	0.00200	0.000199	mg/L	04.24.2019 13:38		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00490	0.0100	0.00273	mg/L	04.18.2019 08:55	J	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW008M**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-012

Date Collected: 04.17.2019 12:57

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1350	25.0	4.29	mg/L	04.23.2019 19:20		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5040	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00329	0.00400	0.000246	mg/L	04.24.2019 13:41	J	1
Chromium	7440-47-3	0.00710	0.00400	0.000525	mg/L	04.24.2019 13:41		1
Iron	7439-89-6	35.9	2.00	0.455	mg/L	04.24.2019 14:02	ⓓ	20
Manganese	7439-96-5	2.95	0.0400	0.00397	mg/L	04.24.2019 14:02	ⓓ	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00430	0.0100	0.00273	mg/L	04.18.2019 08:55	J	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW011A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-013

Date Collected: 04.17.2019 13:13

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	511	10.0	1.72	mg/L	04.23.2019 19:27		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1930	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0144	0.00400	0.000246	mg/L	04.24.2019 13:50		1
Chromium	7440-47-3	0.159	0.00400	0.000525	mg/L	04.24.2019 13:50		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 13:50	U	1
Manganese	7439-96-5	0.182	0.00200	0.000199	mg/L	04.24.2019 13:50		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW056SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-014

Date Collected: 04.17.2019 13:34

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1120	25.0	4.29	mg/L	04.23.2019 19:34		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3650	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0137	0.00800	0.000492	mg/L	04.24.2019 17:13	D	2
Chromium	7440-47-3	0.382	0.00800	0.00105	mg/L	04.24.2019 17:13	D	2
Iron	7439-89-6	<0.0455	0.200	0.0455	mg/L	04.24.2019 17:13	UD	2
Manganese	7439-96-5	0.000420	0.00400	0.000397	mg/L	04.24.2019 17:13	JD	2

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP05**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-015

Date Collected: 04.17.2019 00:00

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	77.3	5.00	0.858	mg/L	04.23.2019 19:42		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1400	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00221	0.00400	0.000246	mg/L	04.24.2019 13:56	J	1
Chromium	7440-47-3	0.0111	0.00400	0.000525	mg/L	04.24.2019 13:56		1
Iron	7439-89-6	0.0544	0.100	0.0227	mg/L	04.24.2019 13:56	J	1
Manganese	7439-96-5	0.0736	0.00200	0.000199	mg/L	04.24.2019 13:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	UK U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP05**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-015

Date Collected: 04.17.2019 00:00

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.21.2019 11:27	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 11:27	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 11:27	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 11:27	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	100	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 20:40	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:40	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 20:40	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 20:40	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 20:40	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 20:40	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:40	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	70 - 130	%		
4-Bromofluorobenzene	98	70 - 130	%		



Analytical Report 620864

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project- N. Eunice

B0048789

08.09.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.09.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **620864**

Eunice Project- N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 620864. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 620864 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 620864****ARCADIS, Midland, TX**

Eunice Project- N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW100	W	04.11.2019 07:59		620864-001
MW076SA	W	04.11.2019 08:46		620864-002
MW075SA	W	04.11.2019 09:21		620864-003
MW084SA	W	04.11.2019 09:41		620864-004
MW085SA	W	04.11.2019 10:08		620864-005
MW086SA	W	04.11.2019 10:32		620864-006
MW071SA	W	04.11.2019 11:40		620864-007
MW065SA	W	04.11.2019 12:30		620864-008
MW066SA	W	04.11.2019 12:53		620864-009
MW073SA	W	04.11.2019 13:18		620864-010
MW072SA	W	04.11.2019 13:38		620864-011
DUP08	W	04.11.2019 00:00		620864-012

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project- N. Eunice**Project ID: B0048789
Work Order Number(s): 620864Report Date: 08.09.2019
Date Received: 04.11.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3085484 TDS by SM2540C

Total Dissolved Solids detected in the blank above the MQL, therefore possible laboratory contamination indicating a potential high bias. Samples in the analytical batch are: 620864-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012.

Batch: LBA-3085763 Chromium, Hexavalent by SW 7196A

All samples were ran within hold time the sampling times were in another time zone.

Batch: LBA-3085767 Chromium, Hexavalent by SW 7196A

Sample 620864 - 012 K-flag due to no sample time entered for duplicate.



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW100**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-001

Date Collected: 04.11.2019 07:59

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	948	10.0	1.72	mg/L	04.17.2019 22:58		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1900	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	04.17.2019 17:44		1
Chromium	7440-47-3	0.00733	0.00400	0.000525	mg/L	04.17.2019 17:44		1
Iron	7439-89-6	0.360	0.100	0.0227	mg/L	04.17.2019 17:44		1
Manganese	7439-96-5	0.299	0.00200	0.000199	mg/L	04.17.2019 17:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	UK	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW076SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-002

Date Collected: 04.11.2019 08:46

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	601	10.0	1.72	mg/L	04.17.2019 23:07		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1950	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0123	0.00400	0.000246	mg/L	04.17.2019 18:05		1
Chromium	7440-47-3	0.0119	0.00400	0.000525	mg/L	04.17.2019 18:05		1
Iron	7439-89-6	0.225	0.100	0.0227	mg/L	04.17.2019 18:05		1
Manganese	7439-96-5	0.00388	0.00200	0.000199	mg/L	04.17.2019 18:05		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0143	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW075SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-003

Date Collected: 04.11.2019 09:21

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	466	10.0	1.72	mg/L	04.17.2019 23:15		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1770	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0134	0.00400	0.000246	mg/L	04.17.2019 18:07		1
Chromium	7440-47-3	0.0128	0.00400	0.000525	mg/L	04.17.2019 18:07		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 18:07	U	1
Manganese	7439-96-5	0.000224	0.00200	0.000199	mg/L	04.17.2019 18:07	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00940	0.0100	0.00273	mg/L	04.12.2019 08:04	J	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW084SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-004

Date Collected: 04.11.2019 09:41

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1220	25.0	4.29	mg/L	04.17.2019 23:23		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5910	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00962	0.00400	0.000246	mg/L	04.17.2019 18:10		1
Chromium	7440-47-3	0.0205	0.00400	0.000525	mg/L	04.17.2019 18:10		1
Iron	7439-89-6	0.415	0.100	0.0227	mg/L	04.17.2019 18:10		1
Manganese	7439-96-5	0.0177	0.00200	0.000199	mg/L	04.17.2019 18:10		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0167	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW085SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-005

Date Collected: 04.11.2019 10:08

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1580	25.0	4.29	mg/L	04.17.2019 23:32		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3660	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.00400	0.000246	mg/L	04.17.2019 18:13		1
Chromium	7440-47-3	0.0559	0.00400	0.000525	mg/L	04.17.2019 18:13		1
Iron	7439-89-6	0.319	0.100	0.0227	mg/L	04.17.2019 18:13		1
Manganese	7439-96-5	0.0265	0.00200	0.000199	mg/L	04.17.2019 18:13		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0236	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW086SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-006

Date Collected: 04.11.2019 10:32

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1370	25.0	4.29	mg/L	04.18.2019 00:05		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	04.17.2019 18:16		1
Chromium	7440-47-3	0.0482	0.00400	0.000525	mg/L	04.17.2019 18:16		1
Iron	7439-89-6	0.0839	0.100	0.0227	mg/L	04.17.2019 18:16	J	1
Manganese	7439-96-5	0.00235	0.00200	0.000199	mg/L	04.17.2019 18:16		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0385	0.0100	0.00273	mg/L	04.12.2019 08:04		1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW071SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-007

Date Collected: 04.11.2019 11:40

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	636	5.00	0.858	mg/L	04.18.2019 12:56		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1490	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00836	0.00400	0.000246	mg/L	04.17.2019 18:19		1
Chromium	7440-47-3	0.00587	0.00400	0.000525	mg/L	04.17.2019 18:19		1
Iron	7439-89-6	0.0284	0.100	0.0227	mg/L	04.17.2019 18:19	J	1
Manganese	7439-96-5	0.216	0.00200	0.000199	mg/L	04.17.2019 18:19		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW065SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-008

Date Collected: 04.11.2019 12:30

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1050	10.0	1.72	mg/L	04.18.2019 00:14		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2590	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	04.17.2019 18:22		1
Chromium	7440-47-3	0.0134	0.00400	0.000525	mg/L	04.17.2019 18:22		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 18:22	U	1
Manganese	7439-96-5	0.0107	0.00200	0.000199	mg/L	04.17.2019 18:22		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00690	0.0100	0.00273	mg/L	04.12.2019 08:04	J	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW066SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-009

Date Collected: 04.11.2019 12:53

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	836	10.0	1.72	mg/L	04.18.2019 00:39		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2040	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00974	0.00400	0.000246	mg/L	04.17.2019 18:25		1
Chromium	7440-47-3	0.0179	0.00400	0.000525	mg/L	04.17.2019 18:25		1
Iron	7439-89-6	0.0678	0.100	0.0227	mg/L	04.17.2019 18:25	J	1
Manganese	7439-96-5	0.0699	0.00200	0.000199	mg/L	04.17.2019 18:25		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00650	0.0100	0.00273	mg/L	04.12.2019 08:04	J	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW073SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-010

Date Collected: 04.11.2019 13:18

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1000	10.0	1.72	mg/L	04.18.2019 00:47		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2020	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0102	0.00400	0.000246	mg/L	04.17.2019 18:27		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.17.2019 18:27	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 18:27	U	1
Manganese	7439-96-5	0.00344	0.00200	0.000199	mg/L	04.17.2019 18:27		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW072SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-011

Date Collected: 04.11.2019 13:38

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	218	5.00	0.858	mg/L	04.18.2019 00:55		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1050	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0186	0.00400	0.000246	mg/L	04.17.2019 18:30		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.17.2019 18:30	U	1
Iron	7439-89-6	0.0464	0.100	0.0227	mg/L	04.17.2019 18:30	J	1
Manganese	7439-96-5	0.00182	0.00200	0.000199	mg/L	04.17.2019 18:30	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:50	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP08**

Matrix: Water

Sample Depth:

Lab Sample Id: 620864-012

Date Collected: 04.11.2019 00:00

Date Received: 04.11.2019 18:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	976	10.0	1.72	mg/L	04.18.2019 01:04		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	04.12.2019 12:50		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	04.17.2019 18:39		1
Chromium	7440-47-3	0.00692	0.00400	0.000525	mg/L	04.17.2019 18:39		1
Iron	7439-89-6	0.345	0.100	0.0227	mg/L	04.17.2019 18:39		1
Manganese	7439-96-5	0.303	0.00200	0.000199	mg/L	04.17.2019 18:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:50	UK	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **3085484-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3085484-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3085484

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5.50	5.00	5.00	mg/L	04.12.2019 12:50	B	1

Sample Id: **3085763-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3085763-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085763

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:04	U	1

Sample Id: **3085767-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3085767-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:50	U	1



Certificate of Analytical Results

620864

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: 7675917-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7675917-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086048

Date Prep: 04.17.2019 09:45

Subcontractor: SUB: T104704215-19-29

Prep seq: 7675917

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.17.2019 17:36	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.17.2019 17:36	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.17.2019 17:36	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.17.2019 17:36	U	1

Sample Id: 7676021-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676021-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086124

Date Prep: 04.17.2019 18:30

Prep seq: 7676021

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	0.197	0.500	0.0858	mg/L	04.17.2019 21:18	BJ	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project- N. Eunice

Work Orders : 620864

Project ID: B0048789

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 620864

Project ID: B0048789

Analyst: SPC

Date Prepared: 04.17.2019

Date Analyzed: 04.17.2019

Lab Batch ID: 3086124

Sample: 7676021-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		0.197	25.0	26.3	105	25.0	26.0	104	1	90-110	20	

Analyst: SCM

Date Prepared: 04.12.2019

Date Analyzed: 04.12.2019

Lab Batch ID: 3085763

Sample: 3085763-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0389	97	0.0400	0.0392	98	1	85-115	20	

Analyst: SCM

Date Prepared: 04.12.2019

Date Analyzed: 04.12.2019

Lab Batch ID: 3085767

Sample: 3085767-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0389	97	0.0400	0.0392	98	1	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 620864

Project ID: B0048789

Analyst: DEP

Date Prepared: 04.17.2019

Date Analyzed: 04.17.2019

Lab Batch ID: 3086048

Sample: 7675917-1-BKS

Batch #: 1

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.0971	97	0.100	0.0966	97	1	80-120	20	
Chromium	<0.000525	0.100	0.0989	99	0.100	0.0990	99	0	80-120	20	
Iron	<0.0227	0.500	0.481	96	0.500	0.485	97	1	80-120	20	
Manganese	<0.000199	0.100	0.0989	99	0.100	0.0992	99	0	80-120	20	

Analyst: SPC

Date Prepared: 04.12.2019

Date Analyzed: 04.12.2019

Lab Batch ID: 3085484

Sample: 3085484-1-BKS

Batch #: 1

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Total Dissolved Solids	5.50	1000	987	99	1000	993	99	1	80-120	10	

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

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

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

All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice****Work Order # :** 620864**Project ID:** B0048789**Lab Batch ID:** 3086124**QC- Sample ID:** 620864-007 S**Batch #:** 1 **Matrix:** Water**Date Analyzed:** 04.18.2019**Date Prepared:** 04.17.2019**Analyst:** SPC**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Chloride by EPA 300		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride		636	902	106	250	884	99	2	90-110	20	

Lab Batch ID: 3086124**QC- Sample ID:** 621306-001 S**Batch #:** 1 **Matrix:** Drinking Water**Date Analyzed:** 04.17.2019**Date Prepared:** 04.17.2019**Analyst:** SPC**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Chloride by EPA 300		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride		7.11	33.2	104	25.0	32.6	102	2	90-110	20	

Lab Batch ID: 3085763**QC- Sample ID:** 620864-001 S**Batch #:** 1 **Matrix:** Water**Date Analyzed:** 04.12.2019**Date Prepared:** 04.12.2019**Analyst:** SCM**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chromium, Hexavalent		<0.00273	0.173	87	0.200	0.175	88	1	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice****Work Order # :** 620864**Project ID:** B0048789**Lab Batch ID:** 3085767**QC- Sample ID:** 620864-011 S**Batch #:** 1 **Matrix:** Water**Date Analyzed:** 04.12.2019**Date Prepared:** 04.12.2019**Analyst:** SCM**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.187	94	0.200	0.187	94	0	75-125	20	

Lab Batch ID: 3086048**QC- Sample ID:** 620864-001 S**Batch #:** 1 **Matrix:** Water**Date Analyzed:** 04.17.2019**Date Prepared:** 04.17.2019**Analyst:** DEP**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.0106	0.100	0.110	99	0.100	0.110	99	0	75-125	20	
Chromium		0.00733	0.100	0.110	103	0.100	0.111	104	1	75-125	20	
Iron		0.360	0.500	0.866	101	0.500	0.875	103	1	75-125	20	
Manganese		0.299	0.100	0.408	109	0.100	0.411	112	1	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project- N. Eunice

Work Order #: 620864

Lab Batch #: 3085484

Date Analyzed: 04.12.2019 12:50

QC- Sample ID: 620864-001 D

Reporting Units: mg/L

Date Prepared: 04.12.2019

Batch #: 1

Project ID: B0048789

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1900	2000	5	10	

Lab Batch #: 3085484

Date Analyzed: 04.12.2019 12:50

QC- Sample ID: 620864-011 D

Reporting Units: mg/L

Date Prepared: 04.12.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1050	1080	3	10	

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

BRL - Below Reporting Limit



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No:

0208604

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ JRC ☐ Superfund ☐	Work Order Comments
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADaPT ☐ Other:	

Project Name:	Eunice Project-N. Eunice	Turn Around		ANALYSIS REQUEST										Work Order Notes									
Project Number:	730048789	Routine ☒																					
P.O. Number:	730048789	Rush:																					
Sampler's Name:	Jay S. Howard	Due Date:																					
SAMPLE RECEIPT				Temp Blank:	Yes	No	Wet Ice:	Yes	No														
Temperature (°C):	26.125			Thermometer ID																			
Received Intact:	Yes			No																			
Cooler Custody Seals:	Yes			No	N/A	Correction Factor:	-0.1																
Sample Custody Seals:	Yes			No	N/A	Total Containers:																	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth																			
MW0100	W	08/11/19	0759																				
MW0765A			0846																				
MW0755A			0921																				
MW0845A			0941																				
MW0855A			1008																				
MW0865A			1032																				
MW0715A			1140																				
MW0655A			1230																				
MW0665A			1253																				
MW0735A	W	08/11/19	1318																				

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Ni Se Ag Ti U
		1631 / 245.1 / 7470 / 7471 : Hg	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Jay S. Howard	Walter Noel	4/11/19 16:17			4/11/19 18:00
3		4			
5		6			

Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Work Order No.:

02064

[illegible]

Inter-Office Shipment

IOS Number : 126578

Date/Time: 04.12.2019 09:12

Created by: Katie Lowe

Please send report to: Brandi Ritcherson

Lab# From: Midland

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: Houston

Air Bill No.: 774963040703

E-Mail: brandi.ritcherson@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
620864-001	W	MW100	04.11.2019 07:59	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-002	W	MW0765A	04.11.2019 08:46	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-003	W	MW0755A	04.11.2019 09:21	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-004	W	MW0845A	04.11.2019 09:41	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-005	W	MW0855A	04.11.2019 10:08	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-006	W	MW0865A	04.11.2019 10:32	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-007	W	MW0715A	04.11.2019 11:40	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-008	W	MW0655A	04.11.2019 12:30	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-009	W	MW0665A	04.11.2019 12:53	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-010	W	MW0735A	04.11.2019 13:18	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-011	W	MW0725A	04.11.2019 13:38	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	
620864-012	W	DUP8	04.11.2019 00:00	SW6020_DIS	Dissolved Metals by SW6020A	04.17.2019	10.08.2019	BAR	AS CR FE MN	

Inter Office Shipment or Sample Comments:



Relinquished By:

Katie Lowe



Received By:

Taha Hedib

Date Relinquished: 04.12.2019

Date Received: 04.13.2019 09:40

Cooler Temperature: 3.8



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 126578

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Katie Lowe

Date Sent: 04/12/2019 09:12 AM

Received By: Taha Hedib

Date Received: 04/13/2019 09:40 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Taha Hedib

Date: 04/13/2019



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 04/11/2019 06:00:00 PM

Work Order #: 620864

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:

Katie Lowe

Date: 04/11/2019

Checklist reviewed by:

Brandi Ritcherson

Date: 04/15/2019



Analytical Report 621021

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project- N. Eunice

B0048789

08.08.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.08.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621021**

Eunice Project- N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621021. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621021 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621021****ARCADIS, Midland, TX**

Eunice Project- N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
IW010	W	04.12.2019 08:55		621021-001
IW008	W	04.12.2019 09:20		621021-002
MW055SA	W	04.12.2019 09:51		621021-003
MW074SA	W	04.12.2019 10:11		621021-004
MW021A	W	04.12.2019 10:34		621021-005

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project- N. Eunice**Project ID: B0048789
Work Order Number(s): 621021Report Date: 08.08.2019
Date Received: 04.12.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3085768 Chromium, Hexavalent by SW 7196A

Sample 1 is a false positive due to iron interference and showed no color change.



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW010**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-001

Date Collected: 04.12.2019 08:55

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2280	25.0	4.29	mg/L	04.19.2019 05:09		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3120	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00899	0.00400	0.000246	mg/L	04.18.2019 21:38		1
Chromium	7440-47-3	0.00202	0.00400	0.000525	mg/L	04.18.2019 21:38	J	1
Iron	7439-89-6	11.8	0.100	0.0227	mg/L	04.18.2019 21:38		1
Manganese	7439-96-5	7.96	0.200	0.0199	mg/L	04.19.2019 12:21	D	100

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00310	0.0100	0.00273	mg/L	04.12.2019 18:15	J	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW008**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-002

Date Collected: 04.12.2019 09:20

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	875	10.0	1.72	mg/L	04.19.2019 05:18		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2160	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0235	0.00400	0.000246	mg/L	04.18.2019 21:49		1
Chromium	7440-47-3	0.00388	0.00400	0.000525	mg/L	04.18.2019 21:49	J	1
Iron	7439-89-6	4.78	0.100	0.0227	mg/L	04.18.2019 21:49		1
Manganese	7439-96-5	1.90	0.0400	0.00397	mg/L	04.19.2019 12:24	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW055SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-003

Date Collected: 04.12.2019 09:51

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	653	10.0	1.72	mg/L	04.19.2019 05:26		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1700	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00749	0.00400	0.000246	mg/L	04.18.2019 21:52		1
Chromium	7440-47-3	0.177	0.00400	0.000525	mg/L	04.18.2019 21:52		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 21:52	U	1
Manganese	7439-96-5	0.000651	0.00200	0.000199	mg/L	04.18.2019 21:52	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.157	0.0100	0.00273	mg/L	04.12.2019 18:15		1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW074SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-004

Date Collected: 04.12.2019 10:11

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	384	5.00	0.858	mg/L	04.19.2019 05:34		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1520	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0151	0.00400	0.000246	mg/L	04.18.2019 21:55		1
Chromium	7440-47-3	0.00508	0.00400	0.000525	mg/L	04.18.2019 21:55		1
Iron	7439-89-6	0.0318	0.100	0.0227	mg/L	04.18.2019 21:55	J	1
Manganese	7439-96-5	0.000585	0.00200	0.000199	mg/L	04.18.2019 21:55	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW021A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621021-005

Date Collected: 04.12.2019 10:34

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1020	25.0	4.29	mg/L	04.19.2019 06:08		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5150	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0110	0.00400	0.000246	mg/L	04.18.2019 21:58		1
Chromium	7440-47-3	0.00295	0.00400	0.000525	mg/L	04.18.2019 21:58	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 21:58	U	1
Manganese	7439-96-5	0.0126	0.00200	0.000199	mg/L	04.18.2019 21:58		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **3085768-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3085768-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085768

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 18:15	U	1

Sample Id: **3086275-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086275-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	04.15.2019 15:42	U	1

Sample Id: **7676022-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676022-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.18.2019 13:54	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 13:54	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 13:54	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 13:54	U	1



Certificate of Analytical Results

621021

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **7676094-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676094-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.19.2019 03:20	U	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621021

Project ID: B0048789

Analyst: CHE

Date Prepared: 04.18.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086304

Sample: 7676094-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	27.5	110	25.0	26.7	107	3	90-110	20	

Analyst: SCM

Date Prepared: 04.12.2019

Date Analyzed: 04.12.2019

Lab Batch ID: 3085768

Sample: 3085768-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0375	94	0.0400	0.0379	95	1	85-115	20	

Analyst: DEP

Date Prepared: 04.18.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086125

Sample: 7676022-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.100	100	0.100	0.0998	100	0	80-120	20	
Chromium		<0.000525	0.100	0.0989	99	0.100	0.0998	100	1	80-120	20	
Iron		<0.0227	0.500	0.495	99	0.500	0.497	99	0	80-120	20	
Manganese		<0.000199	0.100	0.0988	99	0.100	0.0987	99	0	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621021

Analyst: CHE

Lab Batch ID: 3086275

Units: mg/L

Date Prepared: 04.15.2019

Batch #: 1

Sample: 3086275-1-BKS

Project ID: B0048789

Date Analyzed: 04.15.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	TDS by SM2540C	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<5.00	1000	982	98	1000	1000	100	2	80-120	10	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice**

Work Order # : 621021
Lab Batch ID: 3086304
Date Analyzed: 04.19.2019
Reporting Units: mg/L

QC- Sample ID: 621493-001 S
Date Prepared: 04.18.2019
Project ID: B0048789
Batch #: 1
Analyst: CHE
Matrix: Drinking Water

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		18.1	25.0	43.8	103	25.0	45.0	108	3	90-110	20	

Lab Batch ID: 3086304
Date Analyzed: 04.19.2019
Reporting Units: mg/L
QC- Sample ID: 621495-001 S
Date Prepared: 04.18.2019
Batch #: 1
Analyst: CHE
Matrix: Drinking Water

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		3.24	25.0	29.9	107	25.0	30.0	107	0	90-110	20	

Lab Batch ID: 3085768
Date Analyzed: 04.12.2019
Reporting Units: mg/L
QC- Sample ID: 621021-005 S
Date Prepared: 04.12.2019
Batch #: 1
Analyst: SCM
Matrix: Water

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.169	85	0.200	0.170	85	1	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice****Work Order # :** 621021**Project ID:** B0048789**Lab Batch ID:** 3086125**QC- Sample ID:** 620722-001 S**Batch #:** 1**Matrix:** Ground Water**Date Analyzed:** 04.18.2019**Date Prepared:** 04.18.2019**Analyst:** DEP**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0943	94	0.100	0.0965	97	2	75-125	20	
Chromium		<0.000525	0.100	0.0977	98	0.100	0.101	101	3	75-125	20	
Iron		4.40	0.500	5.07	134	0.500	5.03	126	1	75-125	20	X
Manganese		7.91	0.100	8.13	220	0.100	8.12	210	0	75-125	20	X

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
 Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project- N. Eunice

Work Order #: 621021

Lab Batch #: 3086275

Date Analyzed: 04.15.2019 15:42

QC- Sample ID: 621021-001 D

Reporting Units: mg/L

Date Prepared: 04.15.2019

Batch #: 1

Project ID: B0048789

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	3120	3160	1	10	

Lab Batch #: 3086275

Date Analyzed: 04.15.2019 15:42

QC- Sample ID: 621022-006 D

Reporting Units: mg/L

Date Prepared: 04.15.2019

Batch #: 1

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	694	699	1	10	

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

BRL - Below Reporting Limit



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No: 6021021

www.xenco.com Page 1 of 1

Project Manager:	Brett Krehbiel	Bill to: (if different)	NA
Company Name:	ARCADIS	Company Name:	NA
Address:	1004 N. Big Spring St.	Address:	NA
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	NA
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Work Order Comments	
Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Turn Around		ANALYSIS REQUEST										Work Order Notes	
Project Number:	30048758	Routine	☒												
P.O. Number:	30088789	Rush:													
Sampler's Name:	Tom S. Longwell	Due Date:													
SAMPLE RECEIPT Temp Blank: Yes No Wet: Yes No Temperature (°C): <u>51.50</u> Received Intact: Yes No Thermometer ID: <u>RS</u> Cooler Custody Seals: Yes No Correction Factor: <u>0.01</u> Sample Custody Seals: Yes No Total Containers: <u>8</u>															
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										Sample Comments
					BTEX (SW8021)	TPH (SW8015)	Hex Chrome (SW7196A)	Dissolved Metals (SW6020-DIS): Arsenic, Manganese, Iron & Chromium	TDS (SW2640)	Chlorides (E300)					
TW000	W	4/12/19	0955		8									TAT starts the day received by the lab, if received by 4:30pm	
TW008	W	4/12/19	0920		8										
MW005550	W	4/12/19	0951		9										
MW0745A	W	4/12/19	1011		8										
MW021A	W	4/12/19	1034		8										
ASL															

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K-Se-Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Tom S. Longwell	[Signature]	4.12.19 1051			

Inter-Office Shipment

IOS Number : 126643

Date/Time: 04.15.2019 07:45 Created by: Brianna Teel
Lab# From: Midland Delivery Priority:
Lab# To: Houston Air Bill No.: 774976412391

Please send report to: Brandi Ritcherson
Address: 1211 W. Florida Ave
E-Mail: brandi.ritcherson@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621021-001	W	IW010	04.12.2019 08:55	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621021-002	W	IW008	04.12.2019 09:20	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621021-003	W	MW00555A	04.12.2019 09:51	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621021-004	W	MW0745A	04.12.2019 10:11	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621021-005	W	MW021A	04.12.2019 10:34	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	

Inter Office Shipment or Sample Comments:

Relinquished By: 
Brianna Teel
Date Relinquished: 04.15.2019

Received By: 
Taha Hedib
Date Received: 04.16.2019 09:20
Cooler Temperature: 4.9



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 126643

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Brianna Teel

Date Sent: 04/15/2019 07:45 AM

Received By: Taha Hedib

Date Received: 04/16/2019 09:20 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	4.9
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 *Custody Seals Signed and dated for Containers/coolers	N/A
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Taha Hedib

Date: 04/16/2019



Client: ARCADIS

Date/ Time Received: 04/12/2019 04:51:00 PM

Work Order #: 621021

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	5	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:

Katie Lowe

Date: 04/12/2019

Checklist reviewed by:

Brandi Ritcherson

Date: 04/17/2019



Analytical Report 621022

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project- N. Eunice

B0048789

08.09.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.09.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621022**

Eunice Project- N. Eunice

Project Address: Eunice, NM.

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621022. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621022 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621022****ARCADIS, Midland, TX**

Eunice Project- N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW062A	W	04.12.2019 10:00		621022-001
MW063A	W	04.12.2019 10:40		621022-002
MW024A	W	04.12.2019 11:10		621022-003
MW099	W	04.12.2019 11:50		621022-004
MW070	W	04.12.2019 13:30		621022-005
MW030	W	04.12.2019 13:55		621022-006
DUP06	W	04.12.2019 00:00		621022-007
MW058	W	04.12.2019 14:20		621022-008

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project- N. Eunice**Project ID: B0048789
Work Order Number(s): 621022Report Date: 08.09.2019
Date Received: 04.12.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW062A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-001

Date Collected: 04.12.2019 10:00

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	62.9	2.50	0.429	mg/L	04.19.2019 06:16		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	474	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0249	0.00400	0.000246	mg/L	04.18.2019 22:01		1
Chromium	7440-47-3	0.00200	0.00400	0.000525	mg/L	04.18.2019 22:01	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:01	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:01	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW063A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-002

Date Collected: 04.12.2019 10:40

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	58.5	2.50	0.429	mg/L	04.19.2019 06:41		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	459	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0244	0.00400	0.000246	mg/L	04.18.2019 22:04		1
Chromium	7440-47-3	0.00160	0.00400	0.000525	mg/L	04.18.2019 22:04	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:04	U	1
Manganese	7439-96-5	0.000653	0.00200	0.000199	mg/L	04.18.2019 22:04	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW024A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-003

Date Collected: 04.12.2019 11:10

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	997	10.0	1.72	mg/L	04.19.2019 06:50		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2140	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0119	0.00400	0.000246	mg/L	04.18.2019 22:07		1
Chromium	7440-47-3	0.500	0.00400	0.000525	mg/L	04.18.2019 22:07		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:07	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:07	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.474	0.0100	0.00273	mg/L	04.12.2019 17:30		1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW099**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-004

Date Collected: 04.12.2019 11:50

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	72.8	2.50	0.429	mg/L	04.19.2019 06:58		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	453	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00744	0.00400	0.000246	mg/L	04.18.2019 22:10		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 22:10	U	1
Iron	7439-89-6	0.0423	0.100	0.0227	mg/L	04.18.2019 22:10	J	1
Manganese	7439-96-5	0.180	0.00200	0.000199	mg/L	04.18.2019 22:10		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW070**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-005

Date Collected: 04.12.2019 13:30

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	444	5.00	0.858	mg/L	04.19.2019 07:06		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1130	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.00400	0.000246	mg/L	04.18.2019 22:13		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 22:13	U	1
Iron	7439-89-6	0.0443	0.100	0.0227	mg/L	04.18.2019 22:13	J	1
Manganese	7439-96-5	0.000935	0.00200	0.000199	mg/L	04.18.2019 22:13	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW030**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-006

Date Collected: 04.12.2019 13:55

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	220	2.50	0.429	mg/L	04.19.2019 07:15		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	694	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0197	0.00400	0.000246	mg/L	04.18.2019 22:16		1
Chromium	7440-47-3	0.00126	0.00400	0.000525	mg/L	04.18.2019 22:16	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:16	U	1
Manganese	7439-96-5	0.000594	0.00200	0.000199	mg/L	04.18.2019 22:16	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 17:30	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP06**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-007

Date Collected: 04.12.2019 00:00

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1040	5.00	0.858	mg/L	04.19.2019 13:36		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3900	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0130	0.00400	0.000246	mg/L	04.18.2019 22:24		1
Chromium	7440-47-3	3.25	0.200	0.0262	mg/L	04.19.2019 12:27	D	50
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:24	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:24	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.90	0.200	0.0545	mg/L	04.12.2019 17:30		20



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW058**

Matrix: Water

Sample Depth:

Lab Sample Id: 621022-008

Date Collected: 04.12.2019 14:20

Date Received: 04.12.2019 16:51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1150	5.00	0.858	mg/L	04.19.2019 13:44		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4180	5.00	5.00	mg/L	04.15.2019 15:42		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0127	0.00400	0.000246	mg/L	04.18.2019 22:27		1
Chromium	7440-47-3	3.16	0.200	0.0262	mg/L	04.19.2019 16:46	D	50
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:27	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 22:27	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.74	0.200	0.0545	mg/L	04.12.2019 17:30		20



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: 3085767-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3085767-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3085767

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.12.2019 08:50	U	1

Sample Id: 3086275-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3086275-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086275

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	04.15.2019 15:42	U	1

Sample Id: 7676022-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676022-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.18.2019 13:54	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 13:54	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 13:54	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 13:54	U	1



Certificate of Analytical Results

621022

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: 7676094-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676094-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086304

Date Prep: 04.18.2019 16:30

Prep seq: 7676094

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.19.2019 03:20	U	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project- N. Eunice

Work Orders : 621022

Project ID: B0048789

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = $100 * A / B$
All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621022

Project ID: B0048789

Analyst: CHE

Date Prepared: 04.18.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086304

Sample: 7676094-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	27.5	110	25.0	26.7	107	3	90-110	20	

Analyst: SCM

Date Prepared: 04.12.2019

Date Analyzed: 04.12.2019

Lab Batch ID: 3085767

Sample: 3085767-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0389	97	0.0400	0.0392	98	1	85-115	20	

Analyst: DEP

Date Prepared: 04.18.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086125

Sample: 7676022-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.100	100	0.100	0.0998	100	0	80-120	20	
Chromium		<0.000525	0.100	0.0989	99	0.100	0.0998	100	1	80-120	20	
Iron		<0.0227	0.500	0.495	99	0.500	0.497	99	0	80-120	20	
Manganese		<0.000199	0.100	0.0988	99	0.100	0.0987	99	0	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621022

Analyst: CHE

Lab Batch ID: 3086275

Units: mg/L

Date Prepared: 04.15.2019

Batch #: 1

Sample: 3086275-1-BKS

Project ID: B0048789

Date Analyzed: 04.15.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	TDS by SM2540C	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<5.00	1000	982	98	1000	1000	100	2	80-120	10	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621022

Project ID: B0048789

Lab Batch ID: 3086304

QC- Sample ID: 621493-001 S

Batch #: 1 **Matrix:** Drinking Water

Date Analyzed: 04.19.2019

Date Prepared: 04.18.2019

Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride		18.1	43.8	103	25.0	45.0	108	3	90-110	20	

Lab Batch ID: 3086304

QC- Sample ID: 621495-001 S

Batch #: 1 **Matrix:** Drinking Water

Date Analyzed: 04.19.2019

Date Prepared: 04.18.2019

Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride		3.24	29.9	107	25.0	30.0	107	0	90-110	20	

Lab Batch ID: 3085767

QC- Sample ID: 620864-011 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.12.2019

Date Prepared: 04.12.2019

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chromium, Hexavalent		<0.00273	0.187	94	0.200	0.187	94	0	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice****Work Order # :** 621022**Project ID:** B0048789**Lab Batch ID:** 3086125**QC- Sample ID:** 620722-001 S**Batch #:** 1 **Matrix:** Ground Water**Date Analyzed:** 04.18.2019**Date Prepared:** 04.18.2019 **Analyst:** DEP**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0943	94	0.100	0.0965	97	2	75-125	20	
Chromium		<0.000525	0.100	0.0977	98	0.100	0.101	101	3	75-125	20	
Iron		4.40	0.500	5.07	134	0.500	5.03	126	1	75-125	20	X
Manganese		7.91	0.100	8.13	220	0.100	8.12	210	0	75-125	20	X

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
 Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project- N. Eunice

Work Order #: 621022

Lab Batch #: 3086275

Date Analyzed: 04.15.2019 15:42

QC- Sample ID: 621021-001 D

Reporting Units: mg/L

Date Prepared: 04.15.2019

Batch #: 1

Project ID: B0048789

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	3120	3160	1	10	

Lab Batch #: 3086275

Date Analyzed: 04.15.2019 15:42

QC- Sample ID: 621022-006 D

Reporting Units: mg/L

Date Prepared: 04.15.2019

Batch #: 1

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	694	699	1	10	

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

BRL - Below Reporting Limit



Chain of Custody

Work Order No:

621022

Houston, TX (281) 240-4200 Dallas, TX (214) 802-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 EL Paso, TX (915) 555-3443 Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

www.xenco.com

Page 1 of 1

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund State of Project:	
Reporting Level: I	☐ Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD	☐ ADAPT ☐ Other:

Project Name:	Eunice Project-N. Eunice	Turn Around	
Project Number:	6048789	Routine	☒
P.O. Number:	6048789	Rush:	
Sampler's Name:	Ryan Murray	Due Date:	

SAMPLE RECEIPT Temperature (°C): 51.50 Received Intact: Yes ☒ No ☐ Cooler Custody Seals: Yes ☒ No ☐ Sample Custody Seals: Yes ☒ No ☐		Thermometer ID: R8 Correction Factor: -0.1 Total Containers:

ANALYSIS REQUEST		Work Order Notes
Number of Containers BTEX (SW8021) TPH (SW8015) Hex Chrome (SW7196A) Dissolved Metals (SW6020_DIS): Arsenic, Manganese, Iron & Chromium TDS (SW2540) Chlorides (E300)		TAT starts the day received by the lab, if received by 4:30pm Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEX (SW8021)	TPH (SW8015)	Hex Chrome (SW7196A)	Dissolved Metals (SW6020_DIS): Arsenic, Manganese, Iron & Chromium	TDS (SW2540)	Chlorides (E300)	Work Order Notes
MW062A	W	4-12-19	1000	N/A	8	3	2	1	1	1	1	
MW063A	W	4-12-19	1040	N/A	8	3	2	1	1	1	1	
MW024A	W	4-12-19	1110	N/A	8	3	2	1	1	1	1	
MW099	W	4-12-19	1150	N/A	8	3	2	1	1	1	1	
MW070	W	4-12-19	1330	N/A	8	3	2	1	1	1	1	
MW030	W	4-12-19	1355	N/A	8	3	2	1	1	1	1	
DUP06	W	4-12-19	—	N/A	8	3	2	1	1	1	1	
MW058	W	4-12-19	1420	N/A	8	3	2	1	1	1	1	

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13BPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471	Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$8 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4.12.19 1032			

Inter-Office Shipment

IOS Number : 126644

Date/Time: 04.15.2019 07:45

Created by: Brianna Teel

Please send report to: Brandi Ritcherson

Lab# From: Midland

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To:

Houston

Air Bill No.: 774976412391

E-Mail: brandi.ritcherson@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621022-001	W	MW062A	04.12.2019 10:00	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-002	W	MW063A	04.12.2019 10:40	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-003	W	MW024A	04.12.2019 11:10	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-004	W	MW099	04.12.2019 11:50	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-005	W	MW070	04.12.2019 13:30	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-006	W	MW030	04.12.2019 13:55	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-007	W	DUP06	04.12.2019 00:00	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	
621022-008	W	MW058	04.12.2019 14:20	SW6020_DIS	Dissolved Metals by SW6020A	04.18.2019	10.09.2019	BAR	AS BA CR FE MN	

Inter Office Shipment or Sample Comments:

Relinquished By:

Brianna Teel

Brianna Teel

Received By:

Taha Hedib

Taha Hedib

Date Relinquished: 04.15.2019

Date Received: 04.16.2019 09:20

Cooler Temperature: 4.9



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 126644

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Brianna Teel

Date Sent: 04/15/2019 07:45 AM

Received By: Taha Hedib

Date Received: 04/16/2019 09:20 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	4.9
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 *Custody Seals Signed and dated for Containers/coolers	N/A
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Taha Hedib

Date: 04/16/2019



Client: ARCADIS

Date/ Time Received: 04/12/2019 04:51:00 PM

Work Order #: 621022

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	5	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:

Katie Lowe

Date: 04/12/2019

Checklist reviewed by:

Brandi Ritcherson

Date: 04/17/2019



Analytical Report 621177

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project- N. Eunice

B0048789

08.08.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.08.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621177**

Eunice Project- N. Eunice

Project Address: Eunice, NM.

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621177. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621177 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621177****ARCADIS, Midland, TX**

Eunice Project- N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW057SA	W	04.15.2019 08:24		621177-001
MW043	W	04.15.2019 08:53		621177-002
MW050SA	W	04.15.2019 09:06		621177-003
MW051SA	W	04.15.2019 09:24		621177-004
MW079SA	W	04.15.2019 09:49		621177-005
IW003	W	04.15.2019 10:01		621177-006

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project- N. Eunice**Project ID: B0048789
Work Order Number(s): 621177Report Date: 08.08.2019
Date Received: 04.15.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086376 TDS by SM2540C

Total Dissolved Solids detected in the blank above the MQL, therefore possible laboratory contamination indicating a potential high bias. Samples in the analytical batch are: 621177-001, -002, -003, -004, -005, -006.

Batch: LBA-3086447 Chloride by EPA 300

Lab Sample ID 621177-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621177-001, -002, -003, -004, -005, -006.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW057SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-001

Date Collected: 04.15.2019 08:24

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	357	5.00	0.858	mg/L	04.19.2019 13:37		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1500	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0124	0.00400	0.000246	mg/L	04.18.2019 22:30		1
Iron	7439-89-6	0.0850	0.100	0.0227	mg/L	04.18.2019 22:30	J	1
Manganese	7439-96-5	0.00340	0.00200	0.000199	mg/L	04.18.2019 22:30		1
Chromium	7440-47-3	0.0385	0.00400	0.000525	mg/L	04.18.2019 22:30		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0343	0.0100	0.00273	mg/L	04.16.2019 08:00		1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW043**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-002

Date Collected: 04.15.2019 08:53

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	843	10.0	1.72	mg/L	04.19.2019 13:57		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1840	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00504	0.00400	0.000246	mg/L	04.18.2019 22:33		1
Iron	7439-89-6	0.593	0.100	0.0227	mg/L	04.18.2019 22:33		1
Manganese	7439-96-5	0.573	0.00200	0.000199	mg/L	04.18.2019 22:33		1
Chromium	7440-47-3	0.000894	0.00400	0.000525	mg/L	04.18.2019 22:33	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW043**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-002

Date Collected: 04.15.2019 08:53

Date Received: 04.15.2019 16:57

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3087222

Date Prep: 04.27.2019 08:00

Prep seq: 7676726

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.27.2019 10:12	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.27.2019 10:12	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.27.2019 10:12	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.27.2019 10:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	102	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 06:32	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 06:32	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 06:32	U	1
m,p-Xylenes	179601-23-1	0.00131	0.00400	0.000630	mg/L	04.18.2019 06:32	J	1
o-Xylene	95-47-6	0.00103	0.00200	0.000642	mg/L	04.18.2019 06:32	J	1
Total Xylenes	1330-20-7	0.00234	0.00200	0.000630	mg/L	04.18.2019 06:32		1
Total BTEX		0.00234	0.00200	0.000367	mg/L	04.18.2019 06:32		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW050SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-003

Date Collected: 04.15.2019 09:06

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1420	25.0	4.29	mg/L	04.19.2019 14:03		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3500	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00854	0.00400	0.000246	mg/L	04.18.2019 22:36		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:36	U	1
Manganese	7439-96-5	0.0191	0.00200	0.000199	mg/L	04.18.2019 22:36		1
Chromium	7440-47-3	0.329	0.00400	0.000525	mg/L	04.18.2019 22:36		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.290	0.0100	0.00273	mg/L	04.16.2019 08:00		1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW051SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-004

Date Collected: 04.15.2019 09:24

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1220	25.0	4.29	mg/L	04.19.2019 14:10		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0126	0.00400	0.000246	mg/L	04.18.2019 22:39		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 22:39	U	1
Manganese	7439-96-5	0.00822	0.00200	0.000199	mg/L	04.18.2019 22:39		1
Chromium	7440-47-3	0.779	0.00400	0.000525	mg/L	04.18.2019 22:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.733	0.0500	0.0136	mg/L	04.16.2019 08:00		5



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW079SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-005

Date Collected: 04.15.2019 09:49

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	271	5.00	0.858	mg/L	04.19.2019 14:36		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1140	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00583	0.00400	0.000246	mg/L	04.18.2019 22:42		1
Iron	7439-89-6	0.581	0.100	0.0227	mg/L	04.18.2019 22:42		1
Manganese	7439-96-5	0.0511	0.00200	0.000199	mg/L	04.18.2019 22:42		1
Chromium	7440-47-3	0.00103	0.00400	0.000525	mg/L	04.18.2019 22:42	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW003**

Matrix: Water

Sample Depth:

Lab Sample Id: 621177-006

Date Collected: 04.15.2019 10:01

Date Received: 04.15.2019 16:57

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	10.0	1.72	mg/L	04.19.2019 15:32		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2410	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0157	0.00400	0.000246	mg/L	04.18.2019 22:45		1
Iron	7439-89-6	5.02	0.100	0.0227	mg/L	04.18.2019 22:45		1
Manganese	7439-96-5	3.74	0.0400	0.00397	mg/L	05.02.2019 14:58	D	20
Chromium	7440-47-3	0.00880	0.00400	0.000525	mg/L	04.18.2019 22:45		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: 3086366-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3086366-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086366

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1

Sample Id: 3086376-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3086376-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	6.00	5.00	5.00	mg/L	04.19.2019 15:00	B	1

Sample Id: 7676022-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676022-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086125

Date Prep: 04.18.2019 09:25

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676022

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.18.2019 13:54	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.18.2019 13:54	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.18.2019 13:54	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.18.2019 13:54	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **7676070-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676070-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 03:57	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 03:57	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 03:57	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 03:57	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 03:57	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 03:57	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 03:57	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	112	70 - 130	%		

Sample Id: **7676194-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676194-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.19.2019 13:17	U	1



Certificate of Analytical Results

621177

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **7676726-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676726-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3087222

Date Prep: 04.27.2019 08:00

Prep seq: 7676726

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.27.2019 09:11	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.27.2019 09:11	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.27.2019 09:11	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.27.2019 09:11	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	90	70 - 135	%		
o-Terphenyl	92	70 - 135	%		



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project- N. Eunice

Work Orders : 621177

Project ID: B0048789

Lab Batch #: 3086156

Sample: 7676070-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 02:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	70-130	
4-Bromofluorobenzene	0.0294	0.0300	98	70-130	

Lab Batch #: 3086156

Sample: 7676070-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 02:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	70-130	
4-Bromofluorobenzene	0.0298	0.0300	99	70-130	

Lab Batch #: 3086156

Sample: 621022-008 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	70-130	
4-Bromofluorobenzene	0.0286	0.0300	95	70-130	

Lab Batch #: 3086156

Sample: 621022-008 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0287	0.0300	96	70-130	

Lab Batch #: 3086156

Sample: 7676070-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	70-130	
4-Bromofluorobenzene	0.0336	0.0300	112	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project- N. Eunice

Work Orders : 621177

Project ID: B0048789

Lab Batch #: 3087222

Sample: 7676726-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.27.2019 09:11

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	8.98	9.98	90	70-135	
o-Terphenyl	4.58	4.99	92	70-135	

Lab Batch #: 3087222

Sample: 7676726-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.27.2019 09:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.2	9.99	122	70-135	
o-Terphenyl	5.19	5.00	104	70-135	

Lab Batch #: 3087222

Sample: 7676726-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.27.2019 09:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.7	9.98	117	70-135	
o-Terphenyl	5.87	4.99	118	70-135	

Lab Batch #: 3087222

Sample: 621177-002 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.27.2019 10:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.6	9.99	116	70-135	
o-Terphenyl	5.51	4.99	110	70-135	

Lab Batch #: 3087222

Sample: 621177-002 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.27.2019 10:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.6	9.99	116	70-135	
o-Terphenyl	5.60	5.00	112	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621177

Project ID: B0048789

Analyst: SCM

Date Prepared: 04.17.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086156

Sample: 7676070-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.000408	0.100	0.0969	97	0.100	0.0968	97	0	70-130	25	
Toluene		<0.000367	0.100	0.0939	94	0.100	0.0947	95	1	70-130	25	
Ethylbenzene		<0.000657	0.100	0.0974	97	0.100	0.0978	98	0	70-130	25	
m,p-Xylenes		<0.000630	0.200	0.193	97	0.200	0.194	97	1	70-130	25	
o-Xylene		<0.000642	0.100	0.0978	98	0.100	0.0989	99	1	70-130	25	

Analyst: CHE

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086447

Sample: 7676194-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	27.0	108	25.0	26.5	106	2	90-110	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621177

Project ID: B0048789

Analyst: SPC

Date Prepared: 04.16.2019

Date Analyzed: 04.16.2019

Lab Batch ID: 3086366

Batch #: 1

Matrix: Water

Units: mg/L

Sample: 3086366-1-BKS

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0370	93	0.0400	0.0370	93	0	85-115	20	

Analyst: DEP

Date Prepared: 04.18.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086125

Batch #: 1

Matrix: Water

Units: mg/L

Sample: 7676022-1-BKS

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.100	100	0.100	0.0998	100	0	80-120	20	
Iron		<0.0227	0.500	0.495	99	0.500	0.497	99	0	80-120	20	
Manganese		<0.000199	0.100	0.0988	99	0.100	0.0987	99	0	80-120	20	
Chromium		<0.000525	0.100	0.0989	99	0.100	0.0998	100	1	80-120	20	

Analyst: SPC

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086376

Batch #: 1

Matrix: Water

Units: mg/L

Sample: 3086376-1-BKS

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		6.00	1000	989	99	1000	987	99	0	80-120	10	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621177

Analyst: ARM

Lab Batch ID: 3087222

Units: mg/L

Date Prepared: 04.27.2019

Batch #: 1

Sample: 7676726-1-BKS

Project ID: B0048789

Date Analyzed: 04.27.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.987	99.9	97.3	97	99.8	94.6	95	3	70-135	20	
Diesel Range Organics		<0.911	99.9	97.2	97	99.8	94.2	94	3	70-135	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621177 **Project ID:** B0048789
Lab Batch ID: 3086156 **Batch #:** 1 **Matrix:** Water
Date Analyzed: 04.18.2019 **QC- Sample ID:** 621022-008 S
Reporting Units: mg/L **Date Prepared:** 04.17.2019 **Analyst:** SCM

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0856	86	0.100	0.0869	87	2	70-130	25	
Toluene	<0.000367	0.100	0.0883	88	0.100	0.0875	88	1	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0931	93	0.100	0.0917	92	2	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.185	93	0.200	0.182	91	2	70-130	25	
o-Xylene	<0.000642	0.100	0.0930	93	0.100	0.0919	92	1	70-130	25	

Lab Batch ID: 3086447
Date Analyzed: 04.19.2019
Reporting Units: mg/L

QC- Sample ID: 621177-001 S **Batch #:** 1 **Matrix:** Water
Date Prepared: 04.19.2019 **Analyst:** CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	357	250	600	97	250	605	99	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621177 **Project ID:** B0048789
Lab Batch ID: 3086447 **Batch #:** 1 **Matrix:** Water
Date Analyzed: 04.19.2019 **QC- Sample ID:** 621177-006 S
Reporting Units: mg/L **Date Prepared:** 04.19.2019 **Analyst:** CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Chloride	1130	500	1520	78	500	1510	76	1	90-110	20

Lab Batch ID: 3086366 **QC- Sample ID:** 621177-001 S **Batch #:** 1 **Matrix:** Water
Date Analyzed: 04.16.2019 **Date Prepared:** 04.16.2019 **Analyst:** SPC
Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Chromium, Hexavalent	0.0343	0.200	0.242	104	0.200	0.242	104	0	75-125	20

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
 Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621177 **Project ID:** B0048789
Lab Batch ID: 3086125 **Batch #:** 1 **Matrix:** Ground Water
Date Analyzed: 04.18.2019 **QC- Sample ID:** 620722-001 S **Analyst:** DEP
Reporting Units: mg/L **Date Prepared:** 04.18.2019

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0943	94	0.100	0.0965	97	2	75-125	20	
Iron		4.40	0.500	5.07	134	0.500	5.03	126	1	75-125	20	X
Manganese		7.91	0.100	8.13	220	0.100	8.12	210	0	75-125	20	X
Chromium		<0.000525	0.100	0.0977	98	0.100	0.101	101	3	75-125	20	

Lab Batch ID: 3087222 **QC- Sample ID:** 621177-002 S **Batch #:** 1 **Matrix:** Water
Date Analyzed: 04.27.2019 **Date Prepared:** 04.27.2019 **Analyst:** ARM
Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.986	99.9	93.4	93	99.9	92.5	93	1	70-135	20	
Diesel Range Organics		<0.911	99.9	93.8	94	99.9	92.1	92	2	70-135	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project- N. Eunice

Work Order #: 621177

Lab Batch #: 3086376

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621177-001 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Project ID: B0048789

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1500	1550	3	10	

Lab Batch #: 3086376

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621177-006 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	2410	2390	1	10	

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

BRL - Below Reporting Limit



Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3333
Midland, TX (432-704-5440) EL Paso, TX (915) 565-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 291-1111

Chain of Custody

Work Order No:

021177

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐ State of Project: Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Eunice Project-N, Eunice		Turn Around		ANALYSIS REQUEST	Work Order Notes	
Project Number:		30048785		Routine ☒				
P.O. Number:		30048785		Rush:				
Sampler's Name:		Dempsey, Kenneth		Due Date:				
SAMPLE RECEIPT		Temp Blank:		Yes	No			Wet Ice:
Temperature (°C):		0.576.2		Thermometer ID				
Received intact:		☒ Yes		☐ No				
Cooler Custody Seals:		Yes		No		Correction Factor:		-0.1
Sample Custody Seals:		Yes		No		Total Containers:		
Number of Containers								
SW8021)								
W8015)								
rome (SW7196A)								
ed Metals (SW6020_DIS): Aresenic, se, Iron & Chromium								
W2540)								
es (E300)								
TAT starts the day received by the lab, if received by 4:30pm								

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Total 200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:		8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U													
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.																																	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time																												
<i>[Signature]</i>	<i>[Signature]</i>	4/15/12	<i>[Signature]</i>	<i>[Signature]</i>																													
3			4																														
5			6																														

Inter-Office Shipment

IOS Number : 37114

Date/Time: 04.16.2019 10:01

Created by: Katie Lowe

Please send report to: Brandi Ritcherson

Lab# From: Midland

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: Houston

Air Bill No.: 774988048270

E-Mail: brandi.ritcherson@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621177-001	W	MW0575A	04.15.2019 08:24	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE	
621177-002	W	MW043	04.15.2019 08:53	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE	
621177-003	W	MW0505A	04.15.2019 09:06	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE	
621177-004	W	MW0515AA	04.15.2019 09:24	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE	
621177-005	W	MW0795A	04.15.2019 09:49	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE	
621177-006	W	IW003	04.15.2019 10:01	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE	

Inter Office Shipment or Sample Comments:

Relinquished By:



Received By:



Katie Lowe

Monica Shakhshir

Date Relinquished: 04.16.2019

Date Received: 04.17.2019 09:45

Cooler Temperature: 2.1



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 37114

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Katie Lowe

Date Sent: 04/16/2019 10:01 AM

Received By: Monica Shakhshir

Date Received: 04/17/2019 09:45 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Monica Shakhshir

Date: 04/17/2019



Client: ARCADIS

Date/ Time Received: 04/15/2019 04:57:00 PM

Work Order #: 621177

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:

Katie Lowe

Date: 04/15/2019

Checklist reviewed by:

Brandi Ritcherson

Date: 04/17/2019



Analytical Report 621180

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project- N. Eunice

B0048789

08.08.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.08.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621180**

Eunice Project- N. Eunice

Project Address: Eunice, NM.

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621180. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621180 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621180****ARCADIS, Midland, TX**

Eunice Project- N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW023	W	04.15.2019 14:10		621180-001
MW059	W	04.15.2019 14:30		621180-002
MW031	W	04.15.2019 14:50		621180-003
MW069	W	04.15.2019 15:15		621180-004
MW068	W	04.15.2019 15:37		621180-005

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project- N. Eunice**Project ID: B0048789
Work Order Number(s): 621180Report Date: 08.08.2019
Date Received: 04.15.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086376 TDS by SM2540C

Total Dissolved Solids detected in the blank above the MQL, therefore possible laboratory contamination indicating a potential high bias. Samples in the analytical batch are: 621180-001, -002, -003, -004, -005.

Batch: LBA-3086431 Dissolved Metals by SW6020A

621180-004/005 Samples diluted because of sample matrix leading to the failure of internal standard



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW023**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-001

Date Collected: 04.15.2019 14:10

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	860	25.0	4.29	mg/L	04.19.2019 14:43		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3150	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00878	0.00400	0.000246	mg/L	04.19.2019 21:10		1
Iron	7439-89-6	0.0352	0.100	0.0227	mg/L	04.19.2019 21:10	J	1
Manganese	7439-96-5	0.00488	0.00200	0.000199	mg/L	04.19.2019 21:10		1
Chromium	7440-47-3	2.22	0.0800	0.0105	mg/L	04.22.2019 13:37	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.07	0.100	0.0273	mg/L	04.16.2019 08:00		10



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW059**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-002

Date Collected: 04.15.2019 14:30

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	891	10.0	1.72	mg/L	04.19.2019 14:49		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2950	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0148	0.00400	0.000246	mg/L	04.19.2019 21:12		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 21:12	U	1
Manganese	7439-96-5	0.00107	0.00200	0.000199	mg/L	04.19.2019 21:12	J	1
Chromium	7440-47-3	0.460	0.00400	0.000525	mg/L	04.30.2019 20:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.401	0.0100	0.00273	mg/L	04.16.2019 08:00		1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW031**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-003

Date Collected: 04.15.2019 14:50

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	263	2.50	0.429	mg/L	04.19.2019 14:56		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	874	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0847	0.00400	0.000246	mg/L	04.19.2019 21:15		1
Iron	7439-89-6	3.36	0.100	0.0227	mg/L	04.19.2019 21:15		1
Manganese	7439-96-5	0.866	0.00200	0.000199	mg/L	04.19.2019 21:15		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 21:15	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW069**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-004

Date Collected: 04.15.2019 15:15

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	9650	50.0	8.58	mg/L	04.22.2019 10:12		100

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	14800	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0113	0.0200	0.00123	mg/L	04.22.2019 13:11	JD	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:11	UD	5
Manganese	7439-96-5	0.0902	0.0100	0.000993	mg/L	04.22.2019 13:11	D	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	04.22.2019 13:11	UD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW068**

Matrix: Water

Sample Depth:

Lab Sample Id: 621180-005

Date Collected: 04.15.2019 15:37

Date Received: 04.15.2019 17:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	7100	25.0	4.29	mg/L	04.19.2019 15:25		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	10500	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0180	0.0200	0.00123	mg/L	04.22.2019 13:14	JD	5
Iron	7439-89-6	1.66	0.500	0.114	mg/L	04.22.2019 13:14	D	5
Manganese	7439-96-5	2.87	0.0100	0.000993	mg/L	04.22.2019 13:14	D	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	04.22.2019 13:14	UD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **3086368-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086368-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086368

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.16.2019 08:00	U	1

Sample Id: **3086376-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086376-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	6.00	5.00	5.00	mg/L	04.19.2019 15:00	B	1

Sample Id: **7676123-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676123-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.19.2019 20:40	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 20:40	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.19.2019 20:40	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 20:40	U	1



Certificate of Analytical Results

621180

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **7676194-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676194-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.19.2019 13:17	U	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621180

Project ID: B0048789

Analyst: CHE

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086447

Sample: 7676194-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	27.0	108	25.0	26.5	106	2	90-110	20	

Analyst: SPC

Date Prepared: 04.16.2019

Date Analyzed: 04.16.2019

Lab Batch ID: 3086368

Sample: 3086368-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0383	96	0.0400	0.0382	96	0	85-115	20	

Analyst: DEP

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086431

Sample: 7676123-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0951	95	0.100	0.0966	97	2	80-120	20	
Iron		<0.0227	0.500	0.478	96	0.500	0.486	97	2	80-120	20	
Manganese		<0.000199	0.100	0.0941	94	0.100	0.0967	97	3	80-120	20	
Chromium		<0.000525	0.100	0.0950	95	0.100	0.0969	97	2	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621180

Analyst: SPC

Lab Batch ID: 3086376

Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Sample: 3086376-1-BKS

Project ID: B0048789

Date Analyzed: 04.19.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	TDS by SM2540C											
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Total Dissolved Solids	6.00	1000	989	99	1000	987	99	0	80-120	10		

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice**

Work Order # : 621180
Lab Batch ID: 3086447
Date Analyzed: 04.19.2019
Reporting Units: mg/L

QC- Sample ID: 621177-001 S
Date Prepared: 04.19.2019
Project ID: B0048789
Batch #: 1
Matrix: Water
Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		357	250	600	97	250	605	99	1	90-110	20	

Lab Batch ID: 3086447
Date Analyzed: 04.19.2019
Reporting Units: mg/L
QC- Sample ID: 621177-006 S
Date Prepared: 04.19.2019
Batch #: 1
Matrix: Water
Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		1130	500	1520	78	500	1510	76	1	90-110	20	X

Lab Batch ID: 3086368
Date Analyzed: 04.16.2019
Reporting Units: mg/L
QC- Sample ID: 621180-005 S
Date Prepared: 04.16.2019
Batch #: 1
Matrix: Water
Analyst: SPC

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.162	81	0.200	0.162	81	0	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries**Project Name: Eunice Project- N. Eunice****Work Order # :** 621180**Project ID:** B0048789**Lab Batch ID:** 3086431**QC- Sample ID:** 621323-002 S**Batch #:** 1 **Matrix:** Water**Date Analyzed:** 04.22.2019**Date Prepared:** 04.19.2019**Analyst:** DEP**Reporting Units:** mg/L**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.00246	0.100	0.106	106	0.100	0.104	104	2	75-125	20	
Iron		29.7	0.500	30.5	160	0.500	30.5	160	0	75-125	20	X
Manganese		34.8	0.100	35.3	500	0.100	35.4	NC	0	75-125	20	X
Chromium		<0.00525	0.100	0.103	103	0.100	0.104	104	1	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
 Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project- N. Eunice

Work Order #: 621180

Lab Batch #: 3086376

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621177-001 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Project ID: B0048789

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1500	1550	3	10	

Lab Batch #: 3086376

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621177-006 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	2410	2390	1	10	

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

BRL - Below Reporting Limit



Chain of Custody

Work Order No:

621180

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crashead, NM (432) 704-5440

Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com

Page 1 of 1

Project Manager:	Beth Kitchin	Bill to: (if different)	NA
Company Name:	Alcedis	Company Name:	NA
Address:	100 N. Big Spring St.	Address:	NA
City, State ZIP:	Midland, TX 79701	City, State ZIP:	NA
Phone:	916-786-5382	Email:	Beth.Kitchin@alcedis.com

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	Deliverables: EDD ☐ ADAPT ☐ Other: ☐

Project Name:	Eunice Project - N. Eunice	Turn Around	☒
Project Number:	80048789	Route	☒
Project Location:	80048789	Rush:	
Sampler's Name:	Ryan Nanny	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT		Temp Blank: ☒ Yes ☒ No		Wet Ice: ☒ Yes ☒ No	
Temperature (°C):		7.6°C		Thermometer ID	
Received Intact:		Yes ☒ No ☐		Correction Factor:	
Cooler Custody Seals:		Yes ☐ No ☐ N/A ☐		Total Containers:	
Sample Custody Seals:		Yes ☐ No ☐ N/A ☐			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
MW023		W	4-15-19	1410	NA	38	Hex Chrome (SW7196A)	MeOH: Me	
MW059		W	4-15-19	1430	NA	3	Dissolved metals (SW6020-Dis): Arsenic, Magnesium, Iron, Chromium	None: NO	
MW031		W	4-15-19	1450	NA	3	TDS (SW2540), Chloride (E300)	HNO3: HN	
MW069		W	4-15-19	1515	NA	3		H2SO4: H2	
MW068		W	4-15-19	1537	NA	3		HCL: HL	
								NaOH: Na	
								Zn Acetate+ NaOH: Zn	
								TAT starts the day received by the lab, if received by 4:00pm	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time/730	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/15/19/1538			

Inter-Office Shipment

IOS Number : 37121

Date/Time: 04.16.2019 11:17

Created by: Katie Lowe

Please send report to: Brandi Ritcherson

Lab# From: Midland

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: Houston

Air Bill No.: 774988048270

E-Mail: brandi.ritcherson@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621180-001	W	MW023	04.15.2019 14:10	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE MN	
621180-002	W	MW059	04.15.2019 14:30	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE MN	
621180-003	W	MW031	04.15.2019 14:50	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE MN	
621180-004	W	MW069	04.15.2019 15:15	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE MN	
621180-005	W	MW068	04.15.2019 15:37	SW6020_DIS	Dissolved Metals by SW6020A	04.19.2019	10.12.2019	BAR	AS CR FE MN	

Inter Office Shipment or Sample Comments:

Relinquished By: 
Katie Lowe

Received By: 
Monica Shakhshir

Date Relinquished: 04.16.2019

Date Received: 04.17.2019 09:45

Cooler Temperature: 2.1



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 37121

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Katie Lowe

Date Sent: 04/16/2019 11:17 AM

Received By: Monica Shakhshir

Date Received: 04/17/2019 09:45 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Monica Shakhshir

Date: 04/17/2019



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 04/15/2019 05:30:00 PM

Work Order #: 621180

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	7.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Xenco Stafford
#18 Water VOC samples have zero headspace?	N/A

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by: 
Katie Lowe

Date: 04/15/2019

Checklist reviewed by: 
Kelsey Brooks

Date: 04/17/2019



Analytical Report 621298

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project- N. Eunice

08.08.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.08.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621298**

Eunice Project- N. Eunice

Project Address: Eunice, NM.

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621298. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621298 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621298****ARCADIS, Midland, TX**

Eunice Project- N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW095	W	04.16.2019 07:40		621298-001
MW060	W	04.16.2019 08:27		621298-002
MW061	W	04.16.2019 08:58		621298-003
MW094	W	04.16.2019 09:40		621298-004
MW032	W	04.16.2019 09:59		621298-005
MW027	W	04.16.2019 11:19		621298-006
MW026	W	04.16.2019 11:41		621298-007
MW015A	W	04.16.2019 12:03		621298-008
MW013	W	04.16.2019 12:20		621298-009
MW040A	W	04.16.2019 12:35		621298-010
MW010	W	04.16.2019 12:49		621298-011
MW037	W	04.16.2019 13:03		621298-012
MW004A	W	04.16.2019 13:34		621298-013
IW024	W	04.16.2019 13:53		621298-014
DUP04	W	04.16.2019 00:00		621298-015
DUP07	W	04.16.2019 00:00		621298-016

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project- N. Eunice**Project ID:
Work Order Number(s): 621298Report Date: 08.08.2019
Date Received: 04.16.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086370 Chromium, Hexavalent by SW 7196A

Lab Sample ID 621298-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chromium, Hexavalent recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621298-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Chromium, Hexavalent is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3086376 TDS by SM2540C

Total Dissolved Solids detected in the blank above the MQL, therefore possible laboratory contamination indicating a potential high bias. Samples in the analytical batch are: 621298-001, -002, -003, -004, -005, -006, -007, -008, -009.

Batch: LBA-3086438 Dissolved Metals by SW6020A

Sample 003 and 004 re digested to confirm the results for Chromium

Batch: LBA-3086646 Chloride by EPA 300

Lab Sample ID 621300-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621298-010, -011, -012, -013, -014, -015, -016.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW095**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-001

Date Collected: 04.16.2019 07:40

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1500	25.0	4.29	mg/L	04.19.2019 15:51		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3760	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00930	0.00400	0.000246	mg/L	04.19.2019 18:22		1
Chromium	7440-47-3	3.77	0.0800	0.0105	mg/L	04.22.2019 17:33	DX	20
Iron	7439-89-6	0.242	0.100	0.0227	mg/L	04.19.2019 18:22		1
Manganese	7439-96-5	0.147	0.00200	0.000199	mg/L	04.19.2019 18:22		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.46	0.100	0.0273	mg/L	04.17.2019 07:15		10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW060**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-002

Date Collected: 04.16.2019 08:27

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1670	25.0	4.29	mg/L	04.19.2019 15:58		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3390	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00265	0.00400	0.000246	mg/L	04.19.2019 18:42	J	1
Chromium	7440-47-3	0.00195	0.00400	0.000525	mg/L	04.19.2019 18:42	J	1
Iron	7439-89-6	0.796	0.100	0.0227	mg/L	04.19.2019 18:42		1
Manganese	7439-96-5	12.5	0.200	0.0199	mg/L	04.22.2019 17:36	D	100

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	UX	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW061**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-003

Date Collected: 04.16.2019 08:58

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1180	25.0	4.29	mg/L	04.19.2019 16:04		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3980	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0114	0.00400	0.000246	mg/L	04.19.2019 18:44		1
Chromium	7440-47-3	1.38	0.00400	0.000525	mg/L	04.19.2019 18:44		1
Iron	7439-89-6	0.0231	0.100	0.0227	mg/L	04.19.2019 18:44	J	1
Manganese	7439-96-5	0.0246	0.00200	0.000199	mg/L	04.19.2019 18:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.51	0.100	0.0273	mg/L	04.17.2019 07:15		10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW094**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-004

Date Collected: 04.16.2019 09:40

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1070	25.0	4.29	mg/L	04.19.2019 16:11		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3860	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0108	0.00400	0.000246	mg/L	04.19.2019 18:47		1
Chromium	7440-47-3	1.53	0.00400	0.000525	mg/L	04.19.2019 18:47		1
Iron	7439-89-6	0.134	0.100	0.0227	mg/L	04.19.2019 18:47		1
Manganese	7439-96-5	0.0141	0.00200	0.000199	mg/L	04.19.2019 18:47		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.88	0.100	0.0273	mg/L	04.17.2019 07:15		10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW032**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-005

Date Collected: 04.16.2019 09:59

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	386	5.00	0.858	mg/L	04.19.2019 16:18		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1340	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00370	0.00400	0.000246	mg/L	04.19.2019 18:50	J	1
Chromium	7440-47-3	0.00473	0.00400	0.000525	mg/L	04.19.2019 18:50		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 18:50	U	1
Manganese	7439-96-5	0.00172	0.00200	0.000199	mg/L	04.19.2019 18:50	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW027**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-006

Date Collected: 04.16.2019 11:19

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	367	5.00	0.858	mg/L	04.19.2019 16:37		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1550	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00653	0.00400	0.000246	mg/L	04.19.2019 18:53		1
Chromium	7440-47-3	0.00139	0.00400	0.000525	mg/L	04.19.2019 18:53	J	1
Iron	7439-89-6	0.0457	0.100	0.0227	mg/L	04.19.2019 18:53	J	1
Manganese	7439-96-5	0.00129	0.00200	0.000199	mg/L	04.19.2019 18:53	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW026**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-007

Date Collected: 04.16.2019 11:41

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	104	2.50	0.429	mg/L	04.19.2019 16:44		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	696	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00768	0.00400	0.000246	mg/L	04.19.2019 18:56		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 18:56	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 18:56	U	1
Manganese	7439-96-5	0.000977	0.00200	0.000199	mg/L	04.19.2019 18:56	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW015A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-008

Date Collected: 04.16.2019 12:03

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	4250	25.0	4.29	mg/L	04.19.2019 16:50		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	6120	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0136	0.0200	0.00123	mg/L	04.22.2019 17:39	JD	5
Chromium	7440-47-3	0.00983	0.0200	0.00262	mg/L	04.22.2019 17:39	JD	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 17:39	UD	5
Manganese	7439-96-5	0.00203	0.0100	0.000993	mg/L	04.22.2019 17:39	JD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW013**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-009

Date Collected: 04.16.2019 12:20

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	859	10.0	1.72	mg/L	04.19.2019 16:57		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2940	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00809	0.00400	0.000246	mg/L	04.19.2019 19:02		1
Chromium	7440-47-3	2.54	0.0800	0.0105	mg/L	04.22.2019 17:42	D	20
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 19:02	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.19.2019 19:02	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	2.22	0.100	0.0273	mg/L	04.17.2019 07:15		10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW040A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-010

Date Collected: 04.16.2019 12:35

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	56.4	2.50	0.429	mg/L	04.23.2019 13:27		5

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	481	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0203	0.00400	0.000246	mg/L	04.19.2019 19:05		1
Chromium	7440-47-3	0.00285	0.00400	0.000525	mg/L	04.19.2019 19:05	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 19:05	U	1
Manganese	7439-96-5	0.000271	0.00200	0.000199	mg/L	04.19.2019 19:05	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW010**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-011

Date Collected: 04.16.2019 12:49

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2380	25.0	4.29	mg/L	04.23.2019 13:46		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4160	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00885	0.0200	0.00123	mg/L	04.22.2019 17:45	JD	5
Chromium	7440-47-3	0.0273	0.0200	0.00262	mg/L	04.22.2019 17:45	D	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 17:45	UD	5
Manganese	7439-96-5	<0.000993	0.0100	0.000993	mg/L	04.22.2019 17:45	UD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0213	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW037**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-012

Date Collected: 04.16.2019 13:03

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	405	5.00	0.858	mg/L	04.23.2019 13:52		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1320	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0546	0.00400	0.000246	mg/L	04.19.2019 19:16		1
Chromium	7440-47-3	0.00116	0.00400	0.000525	mg/L	04.19.2019 19:16	J	1
Iron	7439-89-6	8.05	0.100	0.0227	mg/L	04.19.2019 19:16		1
Manganese	7439-96-5	0.0493	0.00200	0.000199	mg/L	04.19.2019 19:16		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW037**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-012

Date Collected: 04.16.2019 13:03

Date Received: 04.16.2019 18:30

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	3.22	1.50	0.987	mg/L	04.17.2019 16:33		1
Diesel Range Organics	C10C28DRO	2.87	1.50	0.911	mg/L	04.17.2019 16:33		1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 16:33	U	1
Total TPH	PHC635	6.09	1.50	0.911	mg/L	04.17.2019 16:33		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	102	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.719	0.0200	0.00408	mg/L	04.18.2019 10:32	D	10
Toluene	108-88-3	0.000390	0.00200	0.000367	mg/L	04.18.2019 15:43	J	1
Ethylbenzene	100-41-4	0.134	0.00200	0.000657	mg/L	04.18.2019 15:43		1
m,p-Xylenes	179601-23-1	0.00150	0.00400	0.000630	mg/L	04.18.2019 15:43	J	1
o-Xylene	95-47-6	0.00122	0.00200	0.000642	mg/L	04.18.2019 15:43	J	1
Total Xylenes	1330-20-7	0.00272	0.00200	0.000630	mg/L	04.18.2019 15:43		1
Total BTEX		0.856	0.00200	0.000367	mg/L	04.18.2019 10:32		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	109	70 - 130	%		
4-Bromofluorobenzene	103	70 - 130	%		



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **MW004A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-013

Date Collected: 04.16.2019 13:34

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	550	10.0	1.72	mg/L	04.23.2019 13:58		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1080	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0156	0.00400	0.000246	mg/L	04.22.2019 18:05		1
Chromium	7440-47-3	0.558	0.00400	0.000525	mg/L	04.22.2019 18:05		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.22.2019 18:05	U	1
Manganese	7439-96-5	0.000551	0.00200	0.000199	mg/L	04.22.2019 18:05	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.459	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **IW024**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-014

Date Collected: 04.16.2019 13:53

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	817	25.0	4.29	mg/L	04.23.2019 14:05		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4350	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0113	0.00400	0.000246	mg/L	04.22.2019 18:08		1
Chromium	7440-47-3	1.21	0.00400	0.000525	mg/L	04.22.2019 18:08		1
Iron	7439-89-6	0.321	0.100	0.0227	mg/L	04.22.2019 18:08		1
Manganese	7439-96-5	0.0288	0.00200	0.000199	mg/L	04.22.2019 18:08		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.02	0.0500	0.0136	mg/L	04.17.2019 07:15		5



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP04**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-015

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	374	5.00	0.858	mg/L	04.23.2019 14:24		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	372	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00315	0.00400	0.000246	mg/L	04.19.2019 19:25	J	1
Chromium	7440-47-3	0.00505	0.00400	0.000525	mg/L	04.19.2019 19:25		1
Iron	7439-89-6	0.0230	0.100	0.0227	mg/L	04.19.2019 19:25	J	1
Manganese	7439-96-5	0.00127	0.00200	0.000199	mg/L	04.19.2019 19:25	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	UK	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **DUP07**

Matrix: Water

Sample Depth:

Lab Sample Id: 621298-016

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1410	25.0	4.29	mg/L	04.23.2019 14:30		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5320	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00823	0.00400	0.000246	mg/L	04.19.2019 19:28		1
Chromium	7440-47-3	3.97	0.0800	0.0105	mg/L	04.22.2019 17:54	D	20
Iron	7439-89-6	0.239	0.100	0.0227	mg/L	04.19.2019 19:28		1
Manganese	7439-96-5	0.126	0.00200	0.000199	mg/L	04.19.2019 19:28		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.54	0.100	0.0273	mg/L	04.17.2019 07:15	K	10



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **3086370-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086370-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086370

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1

Sample Id: **3086371-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086371-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1

Sample Id: **3086376-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086376-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086376

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	6.00	5.00	5.00	mg/L	04.19.2019 15:00	B	1

Sample Id: **3086383-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086383-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	04.19.2019 15:00	U	1



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: 7675991-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7675991-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.17.2019 12:12	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.17.2019 12:12	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 12:12	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.17.2019 12:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	121	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Sample Id: 7676070-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676070-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 03:57	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 03:57	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 03:57	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 03:57	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 03:57	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 03:57	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 03:57	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	112	70 - 130	%		



Certificate of Analytical Results

621298

ARCADIS, Midland, TX

Eunice Project- N. Eunice

Sample Id: **7676150-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676150-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086438

Date Prep: 04.19.2019 10:05

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676150

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.19.2019 18:13	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 18:13	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 18:13	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.19.2019 18:13	U	1

Sample Id: **7676194-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676194-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086447

Date Prep: 04.19.2019 10:45

Prep seq: 7676194

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.19.2019 13:17	U	1

Sample Id: **7676334-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676334-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.23.2019 13:08	U	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project- N. Eunice

Work Orders : 621298

Project ID:

Lab Batch #: 3086156

Sample: 7676070-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 02:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0296	0.0300	99	70-130	
4-Bromofluorobenzene	0.0294	0.0300	98	70-130	

Lab Batch #: 3086156

Sample: 7676070-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 02:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0294	0.0300	98	70-130	
4-Bromofluorobenzene	0.0298	0.0300	99	70-130	

Lab Batch #: 3086156

Sample: 621022-008 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0281	0.0300	94	70-130	
4-Bromofluorobenzene	0.0286	0.0300	95	70-130	

Lab Batch #: 3086156

Sample: 621022-008 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0287	0.0300	96	70-130	

Lab Batch #: 3086156

Sample: 7676070-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0305	0.0300	102	70-130	
4-Bromofluorobenzene	0.0336	0.0300	112	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project- N. Eunice

Work Orders : 621298

Project ID:

Lab Batch #: 3086104

Sample: 7675991-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 12:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	9.98	121	70-135	
o-Terphenyl	6.03	4.99	121	70-135	

Lab Batch #: 3086104

Sample: 7675991-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 12:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	13.0	9.99	130	70-135	
o-Terphenyl	6.24	4.99	125	70-135	

Lab Batch #: 3086104

Sample: 7675991-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 12:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.8	9.98	128	70-135	
o-Terphenyl	6.44	4.99	129	70-135	

Lab Batch #: 3086104

Sample: 621022-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 13:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.2	9.99	122	70-135	
o-Terphenyl	5.83	4.99	117	70-135	

Lab Batch #: 3086104

Sample: 621022-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 13:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.6	9.99	126	70-135	
o-Terphenyl	6.32	4.99	127	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621298

Project ID:

Analyst: SCM

Date Prepared: 04.17.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086156

Batch #: 1

Sample: 7676070-1-BKS

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.000408	0.100	0.0969	97	0.100	0.0968	97	0	70-130	25	
Toluene		<0.000367	0.100	0.0939	94	0.100	0.0947	95	1	70-130	25	
Ethylbenzene		<0.000657	0.100	0.0974	97	0.100	0.0978	98	0	70-130	25	
m,p-Xylenes		<0.000630	0.200	0.193	97	0.200	0.194	97	1	70-130	25	
o-Xylene		<0.000642	0.100	0.0978	98	0.100	0.0989	99	1	70-130	25	

Analyst: CHE

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086447

Batch #: 1

Sample: 7676194-1-BKS

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	27.0	108	25.0	26.5	106	2	90-110	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621298

Project ID:

Analyst: CHE

Date Prepared: 04.23.2019

Date Analyzed: 04.23.2019

Lab Batch ID: 3086646

Sample: 7676334-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	25.8	103	25.0	25.7	103	0	90-110	20	

Analyst: SPC

Date Prepared: 04.17.2019

Date Analyzed: 04.17.2019

Lab Batch ID: 3086370

Sample: 3086370-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0374	94	0.0400	0.0373	93	0	85-115	20	

Analyst: SPC

Date Prepared: 04.17.2019

Date Analyzed: 04.17.2019

Lab Batch ID: 3086371

Sample: 3086371-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0363	91	0.0400	0.0366	92	1	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621298

Analyst: DEP

Lab Batch ID: 3086438

Units: mg/L

Date Prepared: 04.19.2019
Batch #: 1
Sample: 7676150-1-BKS

Project ID:

Date Analyzed: 04.19.2019

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0946	95	0.100	0.0984	98	4	80-120	20	
Chromium		<0.000525	0.100	0.0996	100	0.100	0.0980	98	2	80-120	20	
Iron		<0.0227	0.500	0.495	99	0.500	0.492	98	1	80-120	20	
Manganese		<0.000199	0.100	0.0987	99	0.100	0.0974	97	1	80-120	20	

Analyst: SPC Date Prepared: 04.19.2019

Lab Batch ID: 3086376 Sample: 3086376-1-BKS

Units: mg/L

Batch #: 1

Date Analyzed: 04.19.2019

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		6.00	1000	989	99	1000	987	99	0	80-120	10	

Analyst: SPC Date Prepared: 04.19.2019

Lab Batch ID: 3086383 Sample: 3086383-1-BKS

Units: mg/L

Batch #: 1

Date Analyzed: 04.19.2019

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		<5.00	1000	978	98	1000	977	98	0	80-120	10	

Relative Percent Difference $RPD = 200 * [(C-F)/(C+F)]$ Blank Spike Recovery $[D] = 100 * (C)/[B]$ Blank Spike Duplicate Recovery $[G] = 100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order #: 621298

Analyst: ARM

Lab Batch ID: 3086104

Units: mg/L

Sample: 7675991-1-BKS

Date Prepared: 04.17.2019

Batch #: 1

Project ID:

Date Analyzed: 04.17.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.986	99.9	98.9	99	99.8	104	104	5	70-135	20	
Diesel Range Organics		<0.911	99.9	101	101	99.8	107	107	6	70-135	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621298

Project ID:

Lab Batch ID: 3086156

QC- Sample ID: 621022-008 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 04.18.2019

Date Prepared: 04.17.2019 **Analyst:** SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0856	86	0.100	0.0869	87	2	70-130	25	
Toluene	<0.000367	0.100	0.0883	88	0.100	0.0875	88	1	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0931	93	0.100	0.0917	92	2	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.185	93	0.200	0.182	91	2	70-130	25	
o-Xylene	<0.000642	0.100	0.0930	93	0.100	0.0919	92	1	70-130	25	

Lab Batch ID: 3086447

QC- Sample ID: 621177-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 04.19.2019

Date Prepared: 04.19.2019 **Analyst:** CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	357	250	600	97	250	605	99	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621298

Project ID:

Lab Batch ID: 3086447

QC- Sample ID: 621177-006 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.19.2019

Date Prepared: 04.19.2019

Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	1130	1520	78	500	1510	76	1	90-110	20	X

Lab Batch ID: 3086646

QC- Sample ID: 621298-010 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.23.2019

Date Prepared: 04.23.2019

Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	56.4	197	112	125	189	106	4	90-110	20	X

Lab Batch ID: 3086646

QC- Sample ID: 621300-004 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.23.2019

Date Prepared: 04.23.2019

Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	607	1060	91	500	1210	121	13	90-110	20	X

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621298

Project ID:

Lab Batch ID: 3086370

QC- Sample ID: 621298-002 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.17.2019

Date Prepared: 04.17.2019

Analyst: SPC

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.124	62	0.200	0.124	62	0	75-125	20	X

Lab Batch ID: 3086371

QC- Sample ID: 621298-011 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.17.2019

Date Prepared: 04.17.2019

Analyst: SPC

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		0.0213	0.200	0.224	101	0.200	0.224	101	0	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project- N. Eunice

Work Order # : 621298

Lab Batch ID: 3086438

Date Analyzed: 04.19.2019

Reporting Units: mg/L

Project ID:

QC- Sample ID: 621298-001 S

Batch #: 1

Matrix: Water

Date Prepared: 04.19.2019

Analyst: DEP

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Analytes									
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.00930	0.100	0.109	100	0.100	0.109	100	0	75-125	20	
Chromium	3.77	0.100	3.98	210	0.100	3.96	190	1	75-125	20	X
Iron	0.242	0.500	0.825	117	0.500	0.826	117	0	75-125	20	
Manganese	0.147	0.100	0.253	106	0.100	0.251	104	1	75-125	20	

Lab Batch ID: 3086104

QC- Sample ID: 621022-001 S

Batch #: 1

Matrix: Water

Date Analyzed: 04.17.2019

Date Prepared: 04.17.2019

Analyst: ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Analytes									
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<0.986	99.9	97.3	97	99.9	107	107	9	70-135	20	
Diesel Range Organics	<0.911	99.9	102	102	99.9	112	112	9	70-135	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project- N. Eunice

Work Order #: 621298

Lab Batch #: 3086376

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621177-001 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Project ID:

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1500	1550	3	10	

Lab Batch #: 3086376

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621177-006 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	2410	2390	1	10	

Lab Batch #: 3086383

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621298-010 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	481	490	2	10	

Lab Batch #: 3086383

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621300-004 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1860	1850	1	10	

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

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

BRL - Below Reporting Limit



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) El Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813)575-392-7550

Work Order No: 62298

www.xenco.com Page 7 of 2

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

[illegible]

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	23.2			Thermometer ID		
Received Intact:	Yes	No				
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:		
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	BTEX (S)	TPH (SV)	Hex Chn	Dissolve Manganese	TDS (SV)	Chloride							Sample Comments
MW095	W	4-16	0740		3			✓	✓	✓	✓							
MW060	W	4-16	0827		3			✓	✓	✓	✓							
MW061	W	4-16	0858		3			✓	✓	✓	✓							
MW094	W	4-16	0940		3			✓	✓	✓	✓							
MW032	W	4-16	0959		3			✓	✓	✓	✓							
MW027	W	4-16	1119		3			✓	✓	✓	✓							
MW026	W	4-16	1141		3			✓	✓	✓	✓							
MW015A	W	4-16	1203		3			✓	✓	✓	✓							
MW013	W	4-16	1220		3			✓	✓	✓	✓							
MW0904	W	4-16	1235		3			✓	✓	✓	✓							

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn							
Circle Method(s) and Metal(s) to be analyzed			TCLP / SPLP 6010: 8RCRA		Sb		As		Ba		Be		Cd		Cr		Co		Cu		Pb		Mn		Mo		Ni		Se		Ag		Ti		U		V		Hg	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			4/16/19 16:20			4/16/19 18:30
3						
5						

Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Work Order No.:

62/293

Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com

Page 2 of 2

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

TODDSONLINE (973) 592-7530 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000		www.xenco.com	Page <u> 0 </u> of <u> 0 </u>
Work Order Comments			
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project: Reporting: Level I ☐ Level II ☐ Level III ☐ PST/JUST ☐ RRP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____			

[illegible]

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Tl	Sn	U	V	Zn
<i>Circle Method(s) and Metal(s) to be analyzed</i>			TCLP / SPLP 6010:		8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U											
						1631 / 245.1 / 7470 / 7471 : Hg																										

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. <i>[Signature]</i>	<i>[Signature]</i>	4/16/19 16:20	<i>[Signature]</i>	<i>[Signature]</i>	4/16/19 18:30
3			4		
5			6		

Inter-Office Shipment

IOS Number : 37228

Date/Time: 04.17.2019 10:22

Created by: Katie Lowe

Please send report to: John Builes

Lab# From: Midland

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: Houston

Air Bill No.: 775000129282

E-Mail: john.builes@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621298-001	W	MW095	04.16.2019 07:40	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-002	W	MW060	04.16.2019 08:27	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-003	W	MW061	04.16.2019 08:58	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-004	W	MW094	04.16.2019 09:40	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-005	W	MW032	04.16.2019 09:59	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-006	W	MW027	04.16.2019 11:19	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-007	W	MW026	04.16.2019 11:41	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-008	W	MW015A	04.16.2019 12:03	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-009	W	MW013	04.16.2019 12:20	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-010	W	MW040A	04.16.2019 12:35	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-011	W	MW010	04.16.2019 12:49	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-012	W	MW037	04.16.2019 13:03	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-013	W	MW004A	04.16.2019 13:34	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-014	W	IW024	04.16.2019 13:53	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-015	W	DUP 4	04.16.2019 00:00	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621298-016	W	DUP 7	04.16.2019 00:00	SW6020_D1S	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	

Inter Office Shipment or Sample Comments:

Relinquished By:



Katie Lowe

Received By:



Travis Simmons

Date Relinquished: 04.17.2019

Date Received: 04.18.2019 10:00

Cooler Temperature: 1.2



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 37228

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-068

Sent By: Katie Lowe

Date Sent: 04/17/2019 10:22 AM

Received By: Travis Simmons

Date Received: 04/18/2019 10:00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Travis Simmons

Date: 04/18/2019



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 04/16/2019 06:30:00 PM

Work Order #: 621298

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:
Katie Lowe

Date: 04/16/2019

Checklist reviewed by:
Kelsey Brooks

Date: 04/17/2019



Analytical Report 621300

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project-N. Eunice

B0048789

08.09.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.09.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621300**

Eunice Project-N. Eunice

Project Address: Eunice, NM.

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621300. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621300 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621300****ARCADIS, Midland, TX**

Eunice Project-N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW054SA	W	04.16.2019 07:49		621300-001
MW052SA	W	04.16.2019 08:16		621300-002
MW049SA	W	04.16.2019 08:31		621300-003
MW048SA	W	04.16.2019 08:43		621300-004
MW041A	W	04.16.2019 08:59		621300-005
IW019	W	04.16.2019 09:44		621300-006
MW093SA	W	04.16.2019 11:23		621300-007
IW023	W	04.16.2019 12:10		621300-008
MW020A	W	04.16.2019 12:29		621300-009
DUP01	W	04.16.2019 00:00		621300-010
MW019A	W	04.16.2019 12:55		621300-011
MW018	W	04.16.2019 13:17		621300-012
MW097P	W	04.16.2019 13:45		621300-013
DUP03	W	04.16.2019 00:00		621300-014

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project-N. Eunice**Project ID: B0048789
Work Order Number(s): 621300Report Date: 08.09.2019
Date Received: 04.16.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086374 Chromium, Hexavalent by SW 7196A

Samples 621300 -010 and -014 K-flag due to no sample time entered for duplicate.

Batch: LBA-3086388 TDS by SM2540C

Total Dissolved Solids detected in the blank above the MQL, therefore possible laboratory contamination indicating a potential high bias. Samples in the analytical batch are: 621300-014.

Batch: LBA-3086646 Chloride by EPA 300

Lab Sample ID 621300-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621300-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW054SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-001

Date Collected: 04.16.2019 07:49

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	951	10.0	1.72	mg/L	04.23.2019 14:36		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1910	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	04.19.2019 21:24		1
Chromium	7440-47-3	0.122	0.00400	0.000525	mg/L	04.19.2019 21:24		1
Iron	7439-89-6	0.227	0.100	0.0227	mg/L	04.19.2019 21:24		1
Manganese	7439-96-5	0.00730	0.00200	0.000199	mg/L	04.19.2019 21:24		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.117	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW052SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-002

Date Collected: 04.16.2019 08:16

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1590	25.0	4.29	mg/L	04.23.2019 14:43		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3060	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0138	0.00400	0.000246	mg/L	04.19.2019 21:27		1
Chromium	7440-47-3	0.246	0.00400	0.000525	mg/L	04.19.2019 21:27		1
Iron	7439-89-6	0.110	0.100	0.0227	mg/L	04.19.2019 21:27		1
Manganese	7439-96-5	0.00376	0.00200	0.000199	mg/L	04.19.2019 21:27		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.224	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW049SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-003

Date Collected: 04.16.2019 08:31

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1320	25.0	4.29	mg/L	04.23.2019 14:49		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2530	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0125	0.0200	0.00123	mg/L	04.22.2019 13:17	JD	5
Chromium	7440-47-3	0.200	0.0200	0.00262	mg/L	04.22.2019 13:17	D	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:17	UD	5
Manganese	7439-96-5	<0.000993	0.0100	0.000993	mg/L	04.22.2019 13:17	UD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.176	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW048SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-004

Date Collected: 04.16.2019 08:43

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	607	10.0	1.72	mg/L	04.23.2019 14:55		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1860	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0121	0.00400	0.000246	mg/L	04.19.2019 21:33		1
Chromium	7440-47-3	0.396	0.00400	0.000525	mg/L	04.19.2019 21:33		1
Iron	7439-89-6	0.0259	0.100	0.0227	mg/L	04.19.2019 21:33	J	1
Manganese	7439-96-5	0.00124	0.00200	0.000199	mg/L	04.19.2019 21:33	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.363	0.0100	0.00273	mg/L	04.17.2019 07:15		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW041A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-005

Date Collected: 04.16.2019 08:59

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	461	5.00	0.858	mg/L	04.23.2019 15:14		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1530	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0104	0.00400	0.000246	mg/L	04.19.2019 21:36		1
Chromium	7440-47-3	0.201	0.00400	0.000525	mg/L	04.19.2019 21:36		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 21:36	U	1
Manganese	7439-96-5	0.00107	0.00200	0.000199	mg/L	04.19.2019 21:36	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.175	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **IW019**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-006

Date Collected: 04.16.2019 09:44

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	25.0	4.29	mg/L	04.23.2019 15:21		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3310	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00987	0.00400	0.000246	mg/L	04.19.2019 21:45		1
Chromium	7440-47-3	0.672	0.0200	0.00262	mg/L	04.23.2019 16:58	D	5
Iron	7439-89-6	0.0721	0.100	0.0227	mg/L	04.19.2019 21:45	J	1
Manganese	7439-96-5	0.139	0.00200	0.000199	mg/L	04.19.2019 21:45		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.664	0.0500	0.0136	mg/L	04.17.2019 08:31		5



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **IW019**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-006

Date Collected: 04.16.2019 09:44

Date Received: 04.16.2019 18:30

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.17.2019 16:53	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.17.2019 16:53	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 16:53	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.17.2019 16:53	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	102	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 08:30	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:30	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 08:30	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 08:30	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 08:30	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 08:30	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:30	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	113	70 - 130	%		



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW093SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-007

Date Collected: 04.16.2019 11:23

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	984	25.0	4.29	mg/L	04.23.2019 15:40		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3220	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00811	0.00400	0.000246	mg/L	04.19.2019 21:48		1
Chromium	7440-47-3	0.405	0.00400	0.000525	mg/L	04.19.2019 21:48		1
Iron	7439-89-6	0.0483	0.100	0.0227	mg/L	04.19.2019 21:48	J	1
Manganese	7439-96-5	0.244	0.00200	0.000199	mg/L	04.19.2019 21:48		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.365	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **IW023**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-008

Date Collected: 04.16.2019 12:10

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	765	10.0	1.72	mg/L	04.23.2019 15:46		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2790	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00961	0.00400	0.000246	mg/L	04.19.2019 21:51		1
Chromium	7440-47-3	0.345	0.00400	0.000525	mg/L	04.19.2019 21:51		1
Iron	7439-89-6	0.0487	0.100	0.0227	mg/L	04.19.2019 21:51	J	1
Manganese	7439-96-5	0.00282	0.00200	0.000199	mg/L	04.19.2019 21:51		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.315	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW020A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-009

Date Collected: 04.16.2019 12:29

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1320	10.0	1.72	mg/L	04.23.2019 15:53		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2180	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0111	0.0200	0.00123	mg/L	04.22.2019 13:20	JD	5
Chromium	7440-47-3	0.00560	0.0200	0.00262	mg/L	04.22.2019 13:20	JD	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:20	UD	5
Manganese	7439-96-5	0.00112	0.0100	0.000993	mg/L	04.22.2019 13:20	JD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP01**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-010

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	361	25.0	4.29	mg/L	04.23.2019 15:59		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3190	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.0200	0.00123	mg/L	04.22.2019 13:22	JD	5
Chromium	7440-47-3	0.736	0.0200	0.00262	mg/L	04.22.2019 13:22	D	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:22	UD	5
Manganese	7439-96-5	0.105	0.0100	0.000993	mg/L	04.22.2019 13:22	D	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.698	0.0500	0.0136	mg/L	04.17.2019 08:31	K	5



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP01**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-010

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.17.2019 17:12	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.17.2019 17:12	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 17:12	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.17.2019 17:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 08:50	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:50	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 08:50	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 08:50	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 08:50	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 08:50	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 08:50	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	111	70 - 130	%		



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW019A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-011

Date Collected: 04.16.2019 12:55

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	303	5.00	0.858	mg/L	04.23.2019 16:05		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1110	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00627	0.00400	0.000246	mg/L	04.19.2019 21:59		1
Chromium	7440-47-3	0.000853	0.00400	0.000525	mg/L	04.19.2019 21:59	J	1
Iron	7439-89-6	0.0538	0.100	0.0227	mg/L	04.19.2019 21:59	J	1
Manganese	7439-96-5	0.0179	0.00200	0.000199	mg/L	04.19.2019 21:59		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW018**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-012

Date Collected: 04.16.2019 13:17

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	455	5.00	0.858	mg/L	04.23.2019 16:12		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0124	0.00400	0.000246	mg/L	04.19.2019 22:02		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 22:02	U	1
Iron	7439-89-6	0.0574	0.100	0.0227	mg/L	04.19.2019 22:02	J	1
Manganese	7439-96-5	0.00194	0.00200	0.000199	mg/L	04.19.2019 22:02	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW097P**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-013

Date Collected: 04.16.2019 13:45

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1010	25.0	4.29	mg/L	04.23.2019 16:18		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3480	5.00	5.00	mg/L	04.19.2019 15:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0111	0.0200	0.00123	mg/L	04.22.2019 13:25	JD	5
Chromium	7440-47-3	0.479	0.0200	0.00262	mg/L	04.22.2019 13:25	D	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:25	UD	5
Manganese	7439-96-5	0.0557	0.0100	0.000993	mg/L	04.22.2019 13:25	D	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.360	0.0100	0.00273	mg/L	04.17.2019 08:31		1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP03**

Matrix: Water

Sample Depth:

Lab Sample Id: 621300-014

Date Collected: 04.16.2019 00:00

Date Received: 04.16.2019 18:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	10.0	1.72	mg/L	04.23.2019 16:37		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2140	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.0200	0.00123	mg/L	04.22.2019 13:34	JD	5
Chromium	7440-47-3	0.00511	0.0200	0.00262	mg/L	04.22.2019 13:34	JD	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	04.22.2019 13:34	UD	5
Manganese	7439-96-5	0.00123	0.0100	0.000993	mg/L	04.22.2019 13:34	JD	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	UK	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **3086371-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086371-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086371

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 07:15	U	1

Sample Id: **3086374-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086374-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086374

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.17.2019 08:31	U	1

Sample Id: **3086383-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086383-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: SPC

% Moist:

Tech: SPC

Seq Number: 3086383

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	04.19.2019 15:00	U	1

Sample Id: **3086388-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086388-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	18.5	5.00	5.00	mg/L	04.19.2019 16:00	B	1



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: 7675991-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7675991-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086104

Date Prep: 04.17.2019 08:00

Prep seq: 7675991

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.17.2019 12:12	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.17.2019 12:12	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.17.2019 12:12	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.17.2019 12:12	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	121	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Sample Id: 7676070-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676070-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086156

Date Prep: 04.17.2019 16:00

Prep seq: 7676070

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.18.2019 03:57	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.18.2019 03:57	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.18.2019 03:57	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.18.2019 03:57	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.18.2019 03:57	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.18.2019 03:57	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.18.2019 03:57	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	112	70 - 130	%		



Certificate of Analytical Results

621300

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **7676123-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676123-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086431

Date Prep: 04.19.2019 08:10

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676123

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.19.2019 20:40	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.19.2019 20:40	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.19.2019 20:40	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.19.2019 20:40	U	1

Sample Id: **7676334-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676334-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086646

Date Prep: 04.23.2019 11:00

Prep seq: 7676334

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.23.2019 13:08	U	1

Sample Id: **7676336-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676336-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.23.2019 15:46	U	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project-N. Eunice

Work Orders : 621300

Project ID: B0048789

Lab Batch #: 3086156

Sample: 7676070-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 02:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0296	0.0300	99	70-130	
4-Bromofluorobenzene	0.0294	0.0300	98	70-130	

Lab Batch #: 3086156

Sample: 7676070-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 02:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0294	0.0300	98	70-130	
4-Bromofluorobenzene	0.0298	0.0300	99	70-130	

Lab Batch #: 3086156

Sample: 621022-008 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0281	0.0300	94	70-130	
4-Bromofluorobenzene	0.0286	0.0300	95	70-130	

Lab Batch #: 3086156

Sample: 621022-008 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0287	0.0300	96	70-130	

Lab Batch #: 3086156

Sample: 7676070-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.18.2019 03:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0305	0.0300	102	70-130	
4-Bromofluorobenzene	0.0336	0.0300	112	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project-N. Eunice

Work Orders : 621300

Project ID: B0048789

Lab Batch #: 3086104

Sample: 7675991-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 12:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	9.98	121	70-135	
o-Terphenyl	6.03	4.99	121	70-135	

Lab Batch #: 3086104

Sample: 7675991-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 12:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	13.0	9.99	130	70-135	
o-Terphenyl	6.24	4.99	125	70-135	

Lab Batch #: 3086104

Sample: 7675991-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 12:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.8	9.98	128	70-135	
o-Terphenyl	6.44	4.99	129	70-135	

Lab Batch #: 3086104

Sample: 621022-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 13:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.2	9.99	122	70-135	
o-Terphenyl	5.83	4.99	117	70-135	

Lab Batch #: 3086104

Sample: 621022-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.17.2019 13:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.6	9.99	126	70-135	
o-Terphenyl	6.32	4.99	127	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621300

Project ID: B0048789

Analyst: SCM

Date Prepared: 04.17.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086156

Sample: 7676070-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	<0.000408	0.100	0.0969	97	0.100	0.0968	0	70-130	25	
	Toluene	<0.000367	0.100	0.0939	94	0.100	0.0947	1	70-130	25	
	Ethylbenzene	<0.000657	0.100	0.0974	97	0.100	0.0978	0	70-130	25	
	m,p-Xylenes	<0.000630	0.200	0.193	97	0.200	0.194	1	70-130	25	
	o-Xylene	<0.000642	0.100	0.0978	98	0.100	0.0989	1	70-130	25	

Date Prepared: 04.23.2019

Date Analyzed: 04.23.2019

Analyst: CHE

Sample: 7676334-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Chloride by EPA 300	<0.0858	25.0	25.8	103	25.0	25.7	0	90-110	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621300

Project ID: B0048789

Analyst: CHE

Date Prepared: 04.23.2019

Date Analyzed: 04.23.2019

Lab Batch ID: 3086689

Sample: 7676336-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		<0.0858	25.0	24.1	96	25.0	24.6	98	2	90-110	20	

Analyst: SPC

Date Prepared: 04.17.2019

Date Analyzed: 04.17.2019

Lab Batch ID: 3086371

Sample: 3086371-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0363	91	0.0400	0.0366	92	1	85-115	20	

Analyst: SPC

Date Prepared: 04.17.2019

Date Analyzed: 04.17.2019

Lab Batch ID: 3086374

Sample: 3086374-1-BKS

Batch #: 1

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0360	90	0.0400	0.0361	90	0	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621300

Project ID: B0048789

Analyst: DEP

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086431

Sample: 7676123-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0951	95	0.100	0.0966	97	2	80-120	20	
Chromium		<0.000525	0.100	0.0950	95	0.100	0.0969	97	2	80-120	20	
Iron		<0.0227	0.500	0.478	96	0.500	0.486	97	2	80-120	20	
Manganese		<0.000199	0.100	0.0941	94	0.100	0.0967	97	3	80-120	20	

Analyst: SPC

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086383

Sample: 3086383-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		<5.00	1000	978	98	1000	977	98	0	80-120	10	

Analyst: CHE

Date Prepared: 04.19.2019

Date Analyzed: 04.19.2019

Lab Batch ID: 3086388

Sample: 3086388-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		18.5	1000	990	99	1000	992	99	0	80-120	10	

Relative Percent Difference $RPD = 200 * [(C-F)/(C+F)]$ Blank Spike Recovery $[D] = 100 * (C)/[B]$ Blank Spike Duplicate Recovery $[G] = 100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621300

Analyst: ARM

Lab Batch ID: 3086104

Units: mg/L

Sample: 7675991-1-BKS

Date Prepared: 04.17.2019

Batch #: 1

Project ID: B0048789

Date Analyzed: 04.17.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.986	99.9	98.9	99	99.8	104	104	5	70-135	20	
Diesel Range Organics		<0.911	99.9	101	101	99.8	107	107	6	70-135	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621300

Project ID: B0048789

Lab Batch ID: 3086156

QC- Sample ID: 621022-008 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.18.2019

Date Prepared: 04.17.2019 **Analyst:** SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.000408	0.100	0.0856	86	0.100	0.0869	87	2	70-130	25	
Toluene		<0.000367	0.100	0.0883	88	0.100	0.0875	88	1	70-130	25	
Ethylbenzene		<0.000657	0.100	0.0931	93	0.100	0.0917	92	2	70-130	25	
m,p-Xylenes		<0.000630	0.200	0.185	93	0.200	0.182	91	2	70-130	25	
o-Xylene		<0.000642	0.100	0.0930	93	0.100	0.0919	92	1	70-130	25	

Lab Batch ID: 3086646

QC- Sample ID: 621298-010 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.23.2019

Date Prepared: 04.23.2019 **Analyst:** CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		56.4	125	197	112	125	189	106	4	90-110	20	X

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621300 **Project ID:** B0048789
Lab Batch ID: 3086646 **QC- Sample ID:** 621300-004 S **Batch #:** 1 **Matrix:** Water
Date Analyzed: 04.23.2019 **Date Prepared:** 04.23.2019 **Analyst:** CHE
Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	607	1060	91	500	1210	121	13	90-110	20	X

Lab Batch ID: 3086689 **QC- Sample ID:** 621880-001 S **Batch #:** 1 **Matrix:** Drinking Water
Date Analyzed: 04.23.2019 **Date Prepared:** 04.23.2019 **Analyst:** CHE
Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	6.93	32.5	102	25.0	32.0	100	2	90-110	20	

Lab Batch ID: 3086689 **QC- Sample ID:** 621881-001 S **Batch #:** 1 **Matrix:** Drinking Water
Date Analyzed: 04.23.2019 **Date Prepared:** 04.23.2019 **Analyst:** CHE
Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	13.8	39.1	101	25.0	38.9	100	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621300

Project ID: B0048789

Lab Batch ID: 3086371

QC- Sample ID: 621298-011 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.17.2019

Date Prepared: 04.17.2019

Analyst: SPC

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		0.0213	0.200	0.224	101	0.200	0.224	101	0	75-125	20	

Lab Batch ID: 3086374

QC- Sample ID: 621300-005 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.17.2019

Date Prepared: 04.17.2019

Analyst: SPC

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		0.175	0.200	0.375	100	0.200	0.375	100	0	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621300

Project ID: B0048789

Lab Batch ID: 3086431

QC- Sample ID: 621323-002 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.22.2019

Date Prepared: 04.19.2019

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.00246	0.100	0.106	106	0.100	0.104	104	2	75-125	20	
Chromium		<0.00525	0.100	0.103	103	0.100	0.104	104	1	75-125	20	
Iron		29.7	0.500	30.5	160	0.500	30.5	160	0	75-125	20	X
Manganese		34.8	0.100	35.3	500	0.100	35.4	NC	0	75-125	20	X

Lab Batch ID: 3086104

QC- Sample ID: 621022-001 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.17.2019

Date Prepared: 04.17.2019

Analyst: ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.986	99.9	97.3	97	99.9	107	107	9	70-135	20	
Diesel Range Organics		<0.911	99.9	102	102	99.9	112	112	9	70-135	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project-N. Eunice

Work Order #: 621300

Lab Batch #: 3086383

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621298-010 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Project ID: B0048789

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	481	490	2	10	

Lab Batch #: 3086383

Date Analyzed: 04.19.2019 15:00

QC- Sample ID: 621300-004 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: SPC

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	1860	1850	1	10	

Lab Batch #: 3086388

Date Analyzed: 04.19.2019 16:00

QC- Sample ID: 621300-014 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	2140	2150	0	10	

Lab Batch #: 3086388

Date Analyzed: 04.19.2019 16:00

QC- Sample ID: 621481-010 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	3690	3720	1	10	

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

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

BRL - Below Reporting Limit



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Work Order No: 0730

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com Page 1 of 2

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Work Order Comments	
Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADaPT ☐ Other: ☐	

Project Name:		Eunice Project-N. Eunice		Turn Around																																									
Project Number:		20048789		Routine ☒																																									
P.O. Number:		30048789		Rush:																																									
Sampler's Name:		Tony Sibergard		Due Date:																																									
<table border="1"> <thead> <tr> <th colspan="2">SAMPLE RECEIPT</th> <th>Temp Blank:</th> <th>Yes</th> <th>No</th> <th>Wet Ice:</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td colspan="2">Temperature (°C):</td> <td>2.3/2.2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Received Intact:</td> <td>(Yes) No</td> <td></td> <td></td> <td>Thermometer ID</td> <td></td> <td></td> </tr> <tr> <td colspan="2">Cooler Custody Seals:</td> <td>Yes</td> <td>No</td> <td>N/A</td> <td>Correction Factor:</td> <td>-0.1</td> <td></td> </tr> <tr> <td colspan="2">Sample Custody Seals:</td> <td>Yes</td> <td>No</td> <td>N/A</td> <td>Total Containers:</td> <td></td> <td></td> </tr> </tbody> </table>						SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No	Temperature (°C):		2.3/2.2						Received Intact:		(Yes) No			Thermometer ID			Cooler Custody Seals:		Yes	No	N/A	Correction Factor:	-0.1		Sample Custody Seals:		Yes	No	N/A	Total Containers:		
SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No																																						
Temperature (°C):		2.3/2.2																																											
Received Intact:		(Yes) No			Thermometer ID																																								
Cooler Custody Seals:		Yes	No	N/A	Correction Factor:	-0.1																																							
Sample Custody Seals:		Yes	No	N/A	Total Containers:																																								
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth																																								
mw0548A		W	04/06/19	0749																																									
mw0525A		W	4/16/19	0816																																									
mw0498A		W	4/16/19	0831																																									
mw0485A		W	4/16/19	0843																																									
mw041A		W	4/16/19	0859																																									
FW019		W	4/16/19	0844																																									
mw0935A		W	4/16/19	1123																																									
FW023		W	4/16/19	1210																																									
mw020A		W	4/16/19	1229																																									
DUP01		W	4/16/19																																										

Total	200.7 / 6010	200.8 / 6020:	8RCRA Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Cu	Co	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn		
<i>Circle Method(s) and Metal(s) to be analyzed</i>				TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg																												

Notice: Signature of this document constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Tracy S. Longwell	William A. Bell	4/16/19 16:20 ²			4/16/19 1830
3					
5					
6					



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) El Paso, TX (915) 565-3443 Lubbock, TX (806) 794-1296
Phoenix AZ (480-355-9000) Atlanta GA (770) 449-8900

Work Order No:

62130

Project Manager:		Brett Krehbiel		Bill to: (if different)			
Company Name:		ARCADIS		Company Name:			
Address:		1004 N. Big Spring St.		Address:			
City, State ZIP:		Midland, TX. 79701		City, State ZIP:			
Phone:		916-786-5382		Email:		brett.krehbiel@arcadis.com	

ROBBS, NMI (519-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)		www.xenco.com		Page _____ of _____	
Work Order Comments					
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐					
State of Project:					
Reporting: Level I ☐ Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐					
Deliverables: EDD ☐ ADaPT ☐ Other: _____					

[illegible]

Total	200.7 / 6010	200.8 / 6020:	8RCRA Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
<i>Circle Method(s) and Metal(s) to be analyzed</i>			TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/16/19 16:20			4/16/19 13:30

Inter-Office Shipment

IOS Number : 37229

Date/Time: 04.17.2019 10:24

Created by: Katie Lowe

Please send report to: John Builes

Lab# From: Midland

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: Houston

Air Bill No.: 775000129282

E-Mail: john.builes@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621300-001	W	MW0545A	04.16.2019 07:49	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-002	W	MW0525A	04.16.2019 08:16	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-003	W	MW0495A	04.16.2019 08:31	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-004	W	MW0485A	04.16.2019 08:43	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-005	W	MW041A	04.16.2019 08:59	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-006	W	IW019	04.16.2019 09:44	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-007	W	MW0935A	04.16.2019 11:23	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-008	W	IW023	04.16.2019 12:10	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-009	W	MW020A	04.16.2019 12:29	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-010	W	DUP01	04.16.2019 00:00	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-011	W	MW0019A	04.16.2019 12:55	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-012	W	MW018	04.16.2019 13:17	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-013	W	MW0977	04.16.2019 13:45	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	
621300-014	W	DUP03	04.16.2019 00:00	SW6020_DIS	Dissolved Metals by SW6020A	04.22.2019	10.13.2019	JHB	AS CR FE MN	

Inter Office Shipment or Sample Comments:

Relinquished By:



Katie Lowe

Received By:



Travis Simmons

Date Relinquished:

04.17.2019

Date Received:

04.18.2019 10:00

Cooler Temperature:

1.2



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 37229

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-068

Sent By: Katie Lowe

Date Sent: 04/17/2019 10:24 AM

Received By: Travis Simmons

Date Received: 04/18/2019 10:00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Travis Simmons

Date: 04/18/2019



Client: ARCADIS

Date/ Time Received: 04/16/2019 06:30:00 PM

Work Order #: 621300

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:

Katie Lowe

Date: 04/16/2019

Checklist reviewed by:

John Builes

Date: 04/22/2019



Analytical Report 621481

for

ARCADIS

Project Manager: Brett Krehbiel

Eunice Project-N. Eunice

08.08.2019

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.08.2019

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **621481**

Eunice Project-N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621481. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621481 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'JB', is written over a light blue rectangular background.

John Builes
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 621481****ARCADIS, Midland, TX**

Eunice Project-N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW090SA	W	04.17.2019 07:46		621481-001
MW089SA	W	04.17.2019 08:00		621481-002
MW007A	W	04.17.2019 08:16		621481-003
MW047	W	04.17.2019 08:32		621481-004
MW001	W	04.17.2019 08:53		621481-005
MW002A	W	04.17.2019 09:22		621481-006
MW046A	W	04.17.2019 09:50		621481-007
MW045	W	04.17.2019 10:08		621481-008
MW012M	W	04.17.2019 12:18		621481-009
MW088M	W	04.17.2019 12:29		621481-010
MW087A	W	04.17.2019 12:46		621481-011
MW008M	W	04.17.2019 12:57		621481-012
MW011A	W	04.17.2019 13:13		621481-013
MW056SA	W	04.17.2019 13:34		621481-014
DUP05	W	04.17.2019 00:00		621481-015

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: Eunice Project-N. Eunice**Project ID:
Work Order Number(s): 621481Report Date: 08.08.2019
Date Received: 04.17.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086388 TDS by SM2540C

Total Dissolved Solids detected in the blank above the MQL, therefore possible laboratory contamination indicating a potential high bias. Samples in the analytical batch are: 621481-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015.

Batch: LBA-3086885 Chromium, Hexavalent by SW 7196A

All samples ran with in hold time, sampling took place in a different time zone.

Batch: LBA-3086888 Chromium, Hexavalent by SW 7196A

Samples 11 and 12 are a false positive due to iron interference and exhibited no color change.

Sample 621481 -015 K-flag due to no sample time entered for duplicate.



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW090SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-001

Date Collected: 04.17.2019 07:46

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	520	10.0	1.72	mg/L	04.23.2019 16:44		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2210	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00960	0.00400	0.000246	mg/L	04.24.2019 12:26		1
Chromium	7440-47-3	0.265	0.00400	0.000525	mg/L	04.26.2019 21:48		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 12:26	U	1
Manganese	7439-96-5	0.000728	0.00200	0.000199	mg/L	04.24.2019 12:26	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.310	0.0100	0.00273	mg/L	04.18.2019 08:01	K	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW089SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-002

Date Collected: 04.17.2019 08:00

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	934	25.0	4.29	mg/L	04.23.2019 16:51		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4260	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0107	0.00400	0.000246	mg/L	04.24.2019 13:07		1
Chromium	7440-47-3	1.10	0.0400	0.00525	mg/L	04.24.2019 14:05	D	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:05	UD	10
Manganese	7439-96-5	0.00835	0.00200	0.000199	mg/L	04.24.2019 13:07		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.06	0.200	0.0545	mg/L	04.18.2019 08:01	K	20



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW007A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-003

Date Collected: 04.17.2019 08:16

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	792	10.0	1.72	mg/L	04.23.2019 17:16		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3350	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	04.24.2019 13:10		1
Chromium	7440-47-3	0.711	0.0400	0.00525	mg/L	04.24.2019 14:08	D	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:08	UD	10
Manganese	7439-96-5	0.000644	0.00200	0.000199	mg/L	04.24.2019 13:10	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.660	0.200	0.0545	mg/L	04.18.2019 08:01		20



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW047**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-004

Date Collected: 04.17.2019 08:32

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	272	5.00	0.858	mg/L	04.23.2019 17:40		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	968	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	04.24.2019 13:12		1
Chromium	7440-47-3	0.0809	0.00400	0.000525	mg/L	04.24.2019 13:12		1
Iron	7439-89-6	0.0228	0.100	0.0227	mg/L	04.24.2019 16:50	J	1
Manganese	7439-96-5	0.000519	0.00200	0.000199	mg/L	04.24.2019 13:12	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0709	0.0100	0.00273	mg/L	04.18.2019 08:01		1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW001**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-005

Date Collected: 04.17.2019 08:53

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	451	10.0	1.72	mg/L	04.23.2019 17:47		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2570	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00174	0.00400	0.000246	mg/L	04.24.2019 13:15	J	1
Chromium	7440-47-3	0.00142	0.00400	0.000525	mg/L	04.24.2019 13:15	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 16:53	U	1
Manganese	7439-96-5	0.858	0.00200	0.000199	mg/L	04.24.2019 13:15		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW001**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-005

Date Collected: 04.17.2019 08:53

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.21.2019 09:50	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 09:50	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 09:50	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 09:50	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	104	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 20:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 20:01	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 20:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 20:01	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 20:01	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:01	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW002A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-006

Date Collected: 04.17.2019 09:22

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1430	25.0	4.29	mg/L	04.23.2019 17:55		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3420	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0193	0.00400	0.000246	mg/L	04.24.2019 13:18		1
Chromium	7440-47-3	0.889	0.0400	0.00525	mg/L	04.24.2019 14:11	D	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:11	UD	10
Manganese	7439-96-5	0.0201	0.00200	0.000199	mg/L	04.24.2019 13:18		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00890	0.0100	0.00273	mg/L	04.18.2019 08:01	J	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW046A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-007

Date Collected: 04.17.2019 09:50

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	745	10.0	1.72	mg/L	04.23.2019 18:02		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3260	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	04.24.2019 13:21		1
Chromium	7440-47-3	1.49	0.0400	0.00525	mg/L	04.24.2019 14:13	D	10
Iron	7439-89-6	<0.227	1.00	0.227	mg/L	04.24.2019 14:13	UD	10
Manganese	7439-96-5	0.00333	0.00200	0.000199	mg/L	04.24.2019 13:21		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.73	0.200	0.0545	mg/L	04.18.2019 08:01		20



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW046A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-007

Date Collected: 04.17.2019 09:50

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	04.21.2019 10:48	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 10:48	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 10:48	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 10:48	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	110	70 - 135	%		
o-Terphenyl	110	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 20:20	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:20	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 20:20	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 20:20	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 20:20	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 20:20	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:20	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW045**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-008

Date Collected: 04.17.2019 10:08

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	76.0	5.00	0.858	mg/L	04.23.2019 18:09		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1460	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00232	0.00400	0.000246	mg/L	04.24.2019 13:24	J	1
Chromium	7440-47-3	0.0120	0.00400	0.000525	mg/L	04.24.2019 13:24		1
Iron	7439-89-6	0.0767	0.100	0.0227	mg/L	04.24.2019 17:02	J	1
Manganese	7439-96-5	0.0782	0.00200	0.000199	mg/L	04.24.2019 13:24		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW045**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-008

Date Collected: 04.17.2019 10:08

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	04.21.2019 11:08	U	1
Diesel Range Organics	C10C28DRO	<0.912	1.50	0.912	mg/L	04.21.2019 11:08	U	1
Oil Range Hydrocarbons	PHCG2835	<0.912	1.50	0.912	mg/L	04.21.2019 11:08	U	1
Total TPH	PHC635	<0.912	1.50	0.912	mg/L	04.21.2019 11:08	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	101	70 - 135	%		
o-Terphenyl	101	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 19:41	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 19:41	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 19:41	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 19:41	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 19:41	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 19:41	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 19:41	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	107	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW012M**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-009

Date Collected: 04.17.2019 12:18

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	800	25.0	4.29	mg/L	04.23.2019 18:41		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3130	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0652	0.00400	0.000246	mg/L	04.24.2019 13:27		1
Chromium	7440-47-3	0.0306	0.00400	0.000525	mg/L	04.24.2019 13:27		1
Iron	7439-89-6	3.94	0.100	0.0227	mg/L	04.24.2019 16:39		1
Manganese	7439-96-5	0.0507	0.00200	0.000199	mg/L	04.24.2019 13:27		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW088M**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-010

Date Collected: 04.17.2019 12:29

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	957	25.0	4.29	mg/L	04.23.2019 18:49		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3690	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0217	0.00400	0.000246	mg/L	04.24.2019 13:29		1
Chromium	7440-47-3	0.138	0.00400	0.000525	mg/L	04.24.2019 13:29		1
Iron	7439-89-6	1.72	2.00	0.455	mg/L	04.24.2019 13:59	JD	20
Manganese	7439-96-5	1.26	0.0400	0.00397	mg/L	04.24.2019 13:59	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW087A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-011

Date Collected: 04.17.2019 12:46

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1190	25.0	4.29	mg/L	04.23.2019 19:13		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3840	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00120	0.00400	0.000246	mg/L	04.24.2019 13:38	J	1
Chromium	7440-47-3	0.0423	0.00400	0.000525	mg/L	04.24.2019 13:38		1
Iron	7439-89-6	3.56	0.100	0.0227	mg/L	04.24.2019 17:10		1
Manganese	7439-96-5	0.185	0.00200	0.000199	mg/L	04.24.2019 13:38		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00490	0.0100	0.00273	mg/L	04.18.2019 08:55	J	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW008M**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-012

Date Collected: 04.17.2019 12:57

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1350	25.0	4.29	mg/L	04.23.2019 19:20		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5040	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00329	0.00400	0.000246	mg/L	04.24.2019 13:41	J	1
Chromium	7440-47-3	0.00710	0.00400	0.000525	mg/L	04.24.2019 13:41		1
Iron	7439-89-6	35.9	2.00	0.455	mg/L	04.24.2019 14:02	D	20
Manganese	7439-96-5	2.95	0.0400	0.00397	mg/L	04.24.2019 14:02	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00430	0.0100	0.00273	mg/L	04.18.2019 08:55	J	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW011A**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-013

Date Collected: 04.17.2019 13:13

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	511	10.0	1.72	mg/L	04.23.2019 19:27		20

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1930	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0144	0.00400	0.000246	mg/L	04.24.2019 13:50		1
Chromium	7440-47-3	0.159	0.00400	0.000525	mg/L	04.24.2019 13:50		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 13:50	U	1
Manganese	7439-96-5	0.182	0.00200	0.000199	mg/L	04.24.2019 13:50		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **MW056SA**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-014

Date Collected: 04.17.2019 13:34

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1120	25.0	4.29	mg/L	04.23.2019 19:34		50

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3650	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0137	0.00800	0.000492	mg/L	04.24.2019 17:13	D	2
Chromium	7440-47-3	0.382	0.00800	0.00105	mg/L	04.24.2019 17:13	D	2
Iron	7439-89-6	<0.0455	0.200	0.0455	mg/L	04.24.2019 17:13	UD	2
Manganese	7439-96-5	0.000420	0.00400	0.000397	mg/L	04.24.2019 17:13	JD	2

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP05**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-015

Date Collected: 04.17.2019 00:00

Date Received: 04.17.2019 19:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	77.3	5.00	0.858	mg/L	04.23.2019 19:42		10

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1400	5.00	5.00	mg/L	04.19.2019 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00221	0.00400	0.000246	mg/L	04.24.2019 13:56	J	1
Chromium	7440-47-3	0.0111	0.00400	0.000525	mg/L	04.24.2019 13:56		1
Iron	7439-89-6	0.0544	0.100	0.0227	mg/L	04.24.2019 13:56	J	1
Manganese	7439-96-5	0.0736	0.00200	0.000199	mg/L	04.24.2019 13:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	UK	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **DUP05**

Matrix: Water

Sample Depth:

Lab Sample Id: 621481-015

Date Collected: 04.17.2019 00:00

Date Received: 04.17.2019 19:00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.21.2019 11:27	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 11:27	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 11:27	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 11:27	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	100	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 20:40	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:40	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 20:40	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 20:40	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 20:40	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 20:40	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 20:40	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	106	70 - 130	%		
4-Bromofluorobenzene	98	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **3086388-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086388-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086388

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	18.5	5.00	5.00	mg/L	04.19.2019 16:00	B	1

Sample Id: **3086885-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086885-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086885

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:01	U	1

Sample Id: **3086888-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3086888-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086888

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	04.18.2019 08:55	U	1



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: 7676242-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676242-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3086492

Date Prep: 04.21.2019 08:00

Prep seq: 7676242

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	04.21.2019 08:51	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	04.21.2019 08:51	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	04.21.2019 08:51	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	04.21.2019 08:51	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	101	70 - 135	%		

Sample Id: 7676301-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7676301-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3086556

Date Prep: 04.22.2019 14:45

Prep seq: 7676301

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	04.22.2019 18:04	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	04.22.2019 18:04	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	04.22.2019 18:04	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	04.22.2019 18:04	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	04.22.2019 18:04	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	04.22.2019 18:04	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	04.22.2019 18:04	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	101	70 - 130	%		



Certificate of Analytical Results

621481

ARCADIS, Midland, TX

Eunice Project-N. Eunice

Sample Id: **7676321-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676321-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: DEP

Seq Number: 3086717

Date Prep: 04.23.2019 08:50

Subcontractor: SUB: T104704215-19-29

Prep seq: 7676321

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	04.24.2019 12:17	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	04.24.2019 12:17	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	04.24.2019 12:17	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	04.24.2019 12:17	U	1

Sample Id: **7676336-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7676336-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3086689

Date Prep: 04.23.2019 11:30

Prep seq: 7676336

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	04.23.2019 15:46	U	1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project-N. Eunice

Work Orders : 621481

Project ID:

Lab Batch #: 3086556

Sample: 7676301-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.22.2019 16:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	70-130	
4-Bromofluorobenzene	0.0309	0.0300	103	70-130	

Lab Batch #: 3086556

Sample: 7676301-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.22.2019 16:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	70-130	
4-Bromofluorobenzene	0.0304	0.0300	101	70-130	

Lab Batch #: 3086556

Sample: 621481-008 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.22.2019 17:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3086556

Sample: 621481-008 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.22.2019 17:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	70-130	
4-Bromofluorobenzene	0.0294	0.0300	98	70-130	

Lab Batch #: 3086556

Sample: 7676301-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.22.2019 18:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	70-130	
4-Bromofluorobenzene	0.0303	0.0300	101	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Eunice Project-N. Eunice

Work Orders : 621481

Project ID:

Lab Batch #: 3086492

Sample: 7676242-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.21.2019 08:51

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.95	9.98	100	70-135	
o-Terphenyl	5.05	4.99	101	70-135	

Lab Batch #: 3086492

Sample: 7676242-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.21.2019 09:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.9	9.99	119	70-135	
o-Terphenyl	5.90	5.00	118	70-135	

Lab Batch #: 3086492

Sample: 7676242-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.21.2019 09:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.9	9.98	119	70-135	
o-Terphenyl	5.05	4.99	101	70-135	

Lab Batch #: 3086492

Sample: 621481-005 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.21.2019 10:09

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.6	9.98	116	70-135	
o-Terphenyl	5.31	4.99	106	70-135	

Lab Batch #: 3086492

Sample: 621481-005 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04.21.2019 10:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.6	9.99	116	70-135	
o-Terphenyl	6.15	4.99	123	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621481

Project ID:

Analyst: SCM

Date Prepared: 04.22.2019

Date Analyzed: 04.22.2019

Lab Batch ID: 3086556

Sample: 7676301-1-BKS

Batch #: 1

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	<0.000408	0.100	0.0944	94	0.100	0.0947	95	0	70-130	25
	Toluene	<0.000367	0.100	0.0954	95	0.100	0.0936	94	2	70-130	25
	Ethylbenzene	<0.000657	0.100	0.101	101	0.100	0.0982	98	3	70-130	25
	m,p-Xylenes	<0.000630	0.200	0.200	100	0.200	0.194	97	3	70-130	25
o-Xylene	<0.000642	0.100	0.101	101	0.100	0.0986	99	2	70-130	25	

Analyst: CHE

Date Prepared: 04.23.2019

Date Analyzed: 04.23.2019

Lab Batch ID: 3086689

Sample: 7676336-1-BKS

Batch #: 1

Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Chloride	<0.0858	25.0	24.1	96	25.0	24.6	98	2	90-110	20

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621481

Project ID:

Analyst: SCM

Date Prepared: 04.18.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086885

Sample: 3086885-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0388	97	0.0400	0.0402	101	4	85-115	20	

Analyst: SCM

Date Prepared: 04.18.2019

Date Analyzed: 04.18.2019

Lab Batch ID: 3086888

Sample: 3086888-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0379	95	0.0400	0.0385	96	2	85-115	20	

Analyst: DEP

Date Prepared: 04.23.2019

Date Analyzed: 04.24.2019

Lab Batch ID: 3086717

Sample: 7676321-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.0945	95	0.100	0.0963	96	2	80-120	20	
Chromium		<0.000525	0.100	0.0958	96	0.100	0.0968	97	1	80-120	20	
Iron		<0.0227	0.500	0.465	93	0.500	0.469	94	1	80-120	20	
Manganese		<0.000199	0.100	0.0952	95	0.100	0.0954	95	0	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order #: 621481

Analyst: CHE

Lab Batch ID: 3086388

Units: mg/L

Sample: 3086388-1-BKS

Date Prepared: 04.19.2019

Batch #: 1

Project ID:

Date Analyzed: 04.19.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		18.5	1000	990	99	1000	992	99	0	80-120	10	

Date Prepared: 04.21.2019

Batch #: 1

Date Analyzed: 04.21.2019

Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.987	99.9	92.1	92	99.8	93.7	94	2	70-135	20	
Diesel Range Organics		<0.911	99.9	93.1	93	99.8	95.9	96	3	70-135	20	

Relative Percent Difference $RPD = 200 * [(C-F)/(C+F)]$
Blank Spike Recovery $[D] = 100 * (C)/[B]$
Blank Spike Duplicate Recovery $[G] = 100 * (F)/[E]$
All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621481

Project ID:

Lab Batch ID: 3086556

QC- Sample ID: 621481-008 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.22.2019

Date Prepared: 04.22.2019 **Analyst:** SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.000408	0.100	0.0913	91	0.100	0.0953	95	4	70-130	25	
Toluene		<0.000367	0.100	0.0917	92	0.100	0.0936	94	2	70-130	25	
Ethylbenzene		<0.000657	0.100	0.0971	97	0.100	0.0985	99	1	70-130	25	
m,p-Xylenes		<0.000630	0.200	0.192	96	0.200	0.191	96	1	70-130	25	
o-Xylene		<0.000642	0.100	0.0971	97	0.100	0.0966	97	1	70-130	25	

Lab Batch ID: 3086689

QC- Sample ID: 621880-001 S

Batch #: 1 **Matrix:** Drinking Water

Date Analyzed: 04.23.2019

Date Prepared: 04.23.2019 **Analyst:** CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		6.93	25.0	32.5	102	25.0	32.0	100	2	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
Relative Percent Difference $RPD = 200 \times [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621481

Project ID:

Lab Batch ID: 3086689

QC- Sample ID: 621881-001 S

Batch #: 1 **Matrix:** Drinking Water

Date Analyzed: 04.23.2019

Date Prepared: 04.23.2019

Analyst: CHE

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride		13.8	39.1	101	25.0	38.9	100	1	90-110	20	

Lab Batch ID: 3086885

QC- Sample ID: 621481-005 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.18.2019

Date Prepared: 04.18.2019

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chromium, Hexavalent		<0.00273	0.187	94	0.200	0.188	94	1	75-125	20	

Lab Batch ID: 3086888

QC- Sample ID: 621481-015 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.18.2019

Date Prepared: 04.18.2019

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [B]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chromium, Hexavalent		<0.00273	0.179	90	0.200	0.180	90	1	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Eunice Project-N. Eunice

Work Order # : 621481

Project ID:

Lab Batch ID: 3086717

QC- Sample ID: 621481-001 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.24.2019

Date Prepared: 04.23.2019

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.00960	0.100	0.107	97	0.100	0.107	97	0	75-125	20	
Chromium		0.265	0.100	0.345	80	0.100	0.340	75	1	75-125	20	
Iron		<0.0227	0.500	0.474	95	0.500	0.467	93	1	75-125	20	
Manganese		0.000728	0.100	0.0945	94	0.100	0.0928	92	2	75-125	20	

Lab Batch ID: 3086492

QC- Sample ID: 621481-005 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 04.21.2019

Date Prepared: 04.21.2019

Analyst: ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.986	99.8	92.7	93	99.9	91.9	92	1	70-135	20	
Diesel Range Organics		<0.911	99.8	96.4	97	99.9	94.0	94	3	70-135	20	

Matrix Spike Percent Recovery $[D] = 100 * (C-A) / B$
Relative Percent Difference $RPD = 200 * [(C-F) / (C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Method Duplicate

Project Name: Eunice Project-N. Eunice

Work Order #: 621481

Lab Batch #: 3086388

Date Analyzed: 04.19.2019 16:00

QC- Sample ID: 621300-014 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Project ID:

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	2140	2150	0	10	

Lab Batch #: 3086388

Date Analyzed: 04.19.2019 16:00

QC- Sample ID: 621481-010 D

Reporting Units: mg/L

Date Prepared: 04.19.2019

Batch #: 1

Analyst: CHE

Matrix: Water

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total Dissolved Solids	3690	3720	1	10	

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

BRL - Below Reporting Limit



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Project Manager:	Brett Krehbiel	Bill to: (if different)	
Company Name:	ARCADIS	Company Name:	
Address:	1004 N. Big Spring St.	Address:	
City, State ZIP:	Midland, TX. 79701	City, State ZIP:	
Phone:	916-786-5382	Email:	brett.krehbiel@arcadis.com

Project Name:	Eunice Project-N. Eunice	Turn Around	
Project Number:		Routine ☒	
P.O. Number:		Rush:	
Sampler's Name:	Chas Holder	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
	Thermometer ID					
	Received Intact:	Yes	No	Correction Factor:		
	Cooler Custody Seals:	Yes	No	N/A		
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
MW001A MW090 SA	W	4-17	0746	83
MW089 SA	W	4-17	0800	3
MW007 A	W	4-17	0816	3
MW047	W	4-17	0833	3
MW001	W	4-17	0853	8
MW002A	W	4-17	0922	3
MW046 A	W	4-17	0950	8
MW045	W	4-17	1008	8
MW012M	W	4-17	1218	3
MW088M	W	4-17	1229	3

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

(Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	4/17/19 16:48	<i>[Signature]</i>	<i>[Signature]</i>	4/17/19 19:00
3			4		
5			6		

Work Order No: 021481

Page 1 of 2

www.xenco.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADaPT ☐ Other:	

ANALYSIS REQUEST										Work Order Notes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Number of Containers	BTEX (SW8021)	TPH (SW8015)	Hex Chrome (SW1396A)	Dissolved Metals (SW6020 DIS): Arsenic, Manganese, Iron & Chromium	TDS (SW2540)	Chlorides (E300)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1286
Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 520-2000

Work Order No: 6021481

www.xenco.com Page 2 of 2

Program: ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting Level: ☐ Level II ☐ Level III ☐ Level IV ☐
Deliverables: ☐ EDD ☐ ADAPT ☐ Other:

Project Manager: Brett Krehbiel
Company Name: ARCADIS
Address: 1004 N. Big Spring St.
City, State ZIP: Midland, TX. 79701
Phone: 916-786-5382 Email: brett.krehbiel@arcadis.com

Project Name: Eunice Project-N. Eunice
Project Number:
P.O. Number:
Sampler's Name: Chris Holder

Turn Around
Routine ☒
Rush:
Due Date:

SAMPLE RECEIPT
Temperature (°C):
Received Intact: Yes No
Cooler Custody Seals: Yes No N/A
Sample Custody Seals: Yes No N/A
Total Containers:

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
MW087A	W	4-17	1246	
MW008m	W	4-17	1257	
MW011A	W	4-17	1313	
MW057SA	W	4-17	1334	
Dup 05	W	4-17		

Number of Containers: 8

TPH (SW8015)	✓
Hex Chrome (SW7196A)	✓
Dissolved Metals (SW6020-DIS): Arsenic, Magnesium, Iron & Chromium	✓
TDS (SW2640)	✓
Chlorides (E300)	✓

Work Order Notes

TAT starts the day received by the lab, if received by 4:30pm

Sample Comments

Revised Date 05/14/18 Rev. 2018.1

Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliate and subcontractors. Assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Inter-Office Shipment

IOS Number : 37429

Date/Time: 04.19.2019 11:45

Created by: Brianna Teel

Please send report to: John Builes

Lab# From: Midland

Delivery Priority: Fedex

Address: 1211 W. Florida Ave

Lab# To: Houston

Air Bill No.: 775011008164

E-Mail: john.builes@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
621481-001	W	MW0905A	04.17.2019 07:46	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-002	W	MW0895A	04.17.2019 08:00	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-003	W	MW007A	04.17.2019 08:16	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-004	W	MW047	04.17.2019 08:32	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-005	W	MW001	04.17.2019 08:53	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-006	W	MW002A	04.17.2019 09:22	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-007	W	MW046A	04.17.2019 09:50	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-008	W	MW045	04.17.2019 10:08	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-009	W	MW12M	04.17.2019 12:18	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-010	W	MW88M	04.17.2019 12:29	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-011	W	MW087A	04.17.2019 12:46	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-012	W	MW008M	04.17.2019 12:57	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-013	W	MW011A	04.17.2019 13:13	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-014	W	MW0565A	04.17.2019 13:34	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	
621481-015	W	DUP 05	04.17.2019 00:00	SW6020_DIS	Dissolved Metals by SW6020A	04.23.2019	10.14.2019	JHB	AS CR FE MN	

Inter Office Shipment or Sample Comments:

Relinquished By:

Brianna Teel

Brianna Teel

Received By:

Travis Simmons

Travis Simmons

Date Relinquished: 04.19.2019

Date Received: 04.19.2019 09:40

Cooler Temperature: 2.2



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 37429

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-068

Sent By: Brianna Teel

Date Sent: 04/19/2019 11:45 AM

Received By: Travis Simmons

Date Received: 04/19/2019 09:40 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Travis Simmons

Date: 04/19/2019



Client: ARCADIS

Date/ Time Received: 04/17/2019 07:00:00 PM

Work Order #: 621481

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Xenco Stafford
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst: BT

PH Device/Lot#: A023690

Checklist completed by:

Katie Lowe

Date: 04/17/2019

Checklist reviewed by:

John Builes

Date: 04/20/2019



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Lab Work Order #

Page 1 of 1

Contact & Company Name:		Telephone:		B		C		E	
Brett Krehbiel Arcadis		916-786-0320							
Address:		Fax:							
101 Creekside Ridge Court, Suite 200		916-786-0366							
City State Zip		Email Address:							
Roseville CA 95678		brett.krehbiel@arcadis.com							
Project Name/Location (City, State):		Project #:							
Chevron N. Eunice		B0048789.0004							
Sampler's Printed Name:		Sampler's Signature:							
GARY S. LONGWELL									
Sample ID	Collection Date	Time	Type (✓)	Comp	Grab	Matrix			
MW0001-N-180911	09/11/18	11:50	X			W			
MW0046A-N-180911	09/11/18	12:20	X			W			
MW0045-N-180911	09/11/18	12:26	X			W			
MW0037-N-180911	09/11/18	12:49	X			W			
MW0043-N-180911	09/11/18	13:46	X			W			
TD0019-W-180911	09/11/18	13:12	X			W			
MW0100-N-180911	09/11/18	13:42	X			W			
MW0076SA-N-180911	09/11/18	14:02	X			W			
MW0075SA-N-180911	09/11/18	14:12	X			W			
MW0084SA-N-180911	09/11/18	14:23	X			W			
MW0085SA-N-180911	09/11/18	14:32	X			W			
MW0086SA-N-180911	09/11/18	14:47	X			W			
DD0003-N-180911	09/11/18		X			W			
DD0007-N-180911	09/11/18		X			W			

PARAMETER ANALYSIS & METHOD

Preservative	Filtered (✓)	B	C	E
# of Containers		21	14	14
Container Information		1	3	4
BTEX 8021B		2	1	1
TPH GRO & DRO		2	1	1
8015B		2	1	1
Dissolved As, Mn, Fe, Cr 6010B		2	1	1
Dissolved Hex		2	1	1
Chloride & TDS		2	1	1

Special Instructions/Comments:

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name:	Cooler Custody Seal (✓)	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:
Xenco	☒ Intact ☐ Not Intact	Gary S. Longwell		Wilson Beck		Julian Martinez			
Specify Turnaround Requirements	Sample Receipt:	Firm:	Signature:	Firm:	Signature:	Firm:	Signature:		
Standard TAT	Condition/Cooler Temp. 0.3100	Arcadis	Xenco	Xenco	Xenco	Xenco	Xenco		
Shipping Tracking #:		Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:		
		09/11/18	09/11/18	09/11/18	09/11/18	09/11/18	09/11/18		

Distribution:

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK - Retained by Arcadis



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW001-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-001

Date Collected: 09.11.18 11.50

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2610	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	275	10.0	1.72	mg/L	09.12.18 22:18		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00241	0.00400	0.000246	mg/L	09.16.18 23:18	J	1
Chromium	7440-47-3	0.00146	0.00400	0.000525	mg/L	09.16.18 23:18	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:18	U	1
Manganese	7439-96-5	0.584	0.00200	0.000199	mg/L	09.16.18 23:18		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW001-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-001

Date Collected: 09.11.18 11.50

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.14.18 23:25	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	99	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 16:39	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 16:39	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 16:39	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 16:39	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 16:39	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 16:39	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 16:39	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW046A-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-002

Date Collected: 09.11.18 12.20

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2980	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	704	10.0	1.72	mg/L	09.12.18 22:45		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	09.16.18 23:41		1
Chromium	7440-47-3	1.77	0.00400	0.000525	mg/L	09.16.18 23:41		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:41	U	1
Manganese	7439-96-5	0.00129	0.00200	0.000199	mg/L	09.16.18 23:41	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.67	0.100	0.0273	mg/L	09.12.18 09:45		10



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW046A-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-002

Date Collected: 09.11.18 12.20

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	09.15.18 00:24	U	1
Diesel Range Organics	C10C28DRO	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1
Oil Range Hydrocarbons	PHCG2835	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1
Total TPH	PHC635	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	91	70 - 135	%		
o-Terphenyl	92	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 17:00	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:00	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 17:00	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 17:00	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 17:00	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 17:00	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 17:00	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	70 - 130	%		
4-Bromofluorobenzene	87	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW045-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-003

Date Collected: 09.11.18 12.26

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1350	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	72.1	5.00	0.858	mg/L	09.12.18 22:54		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00213	0.00400	0.000246	mg/L	09.16.18 23:44	J	1
Chromium	7440-47-3	0.0131	0.00400	0.000525	mg/L	09.16.18 23:44		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:44	U	1
Manganese	7439-96-5	0.0710	0.00200	0.000199	mg/L	09.16.18 23:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW045-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-003

Date Collected: 09.11.18 12.26

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 00:44	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 17:20	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:20	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 17:20	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 17:20	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 17:20	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 17:20	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 17:20	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW037-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-004

Date Collected: 09.11.18 12.49

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1470	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	549	10.0	1.72	mg/L	09.12.18 23:04		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0502	0.00400	0.000246	mg/L	09.16.18 23:47		1
Chromium	7440-47-3	0.00126	0.00400	0.000525	mg/L	09.16.18 23:47	J	1
Iron	7439-89-6	7.15	0.100	0.0227	mg/L	09.16.18 23:47		1
Manganese	7439-96-5	0.0653	0.00200	0.000199	mg/L	09.16.18 23:47		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW037-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-004

Date Collected: 09.11.18 12.49

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	09.15.18 01:04	U	1
Diesel Range Organics	C10C28DRO	1.04	1.50	0.911	mg/L	09.15.18 01:04	J	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:04	U	1
Total TPH	PHC635	1.04	1.50	0.911	mg/L	09.15.18 01:04	J	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0719	0.00200	0.000408	mg/L	09.12.18 17:40		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:40	U	1
Ethylbenzene	100-41-4	0.0108	0.00200	0.000657	mg/L	09.12.18 17:40		1
m,p-Xylenes	179601-23-1	0.00593	0.00400	0.000630	mg/L	09.12.18 17:40		1
o-Xylene	95-47-6	0.00384	0.00200	0.000642	mg/L	09.12.18 17:40		1
Total Xylenes	1330-20-7	0.00977	0.00200	0.000630	mg/L	09.12.18 17:40		1
Total BTEX		0.0925	0.00200	0.000367	mg/L	09.12.18 17:40		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	119	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW043-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-005

Date Collected: 09.11.18 13.46

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1620	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	610	10.0	1.72	mg/L	09.12.18 23:13		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00508	0.00400	0.000246	mg/L	09.16.18 23:50		1
Chromium	7440-47-3	0.000688	0.00400	0.000525	mg/L	09.16.18 23:50	J	1
Iron	7439-89-6	0.152	0.100	0.0227	mg/L	09.16.18 23:50		1
Manganese	7439-96-5	0.545	0.00200	0.000199	mg/L	09.16.18 23:50		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW043-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-005

Date Collected: 09.11.18 13.46

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 01:24	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	92	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 19:28	U UJ	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 19:28	U UJ	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 19:28	U UJ	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 19:28	U UJ	1
o-Xylene	95-47-6	0.00347	0.00200	0.000642	mg/L	09.12.18 19:28	J	1
Total Xylenes	1330-20-7	0.00347	0.00200	0.000630	mg/L	09.12.18 19:28	J	1
Total BTEX		0.00347	0.00200	0.000367	mg/L	09.12.18 19:28	J	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	63	70 - 130	%		**
4-Bromofluorobenzene	94	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW019-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-006

Date Collected: 09.11.18 13.17

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	25.0	4.29	mg/L	09.12.18 23:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.16.18 23:53		1
Chromium	7440-47-3	0.757	0.00400	0.000525	mg/L	09.16.18 23:53		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:53	U	1
Manganese	7439-96-5	0.0349	0.00200	0.000199	mg/L	09.16.18 23:53		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.687	0.0500	0.0136	mg/L	09.12.18 09:45		5



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW019-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-006

Date Collected: 09.11.18 13.17

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 01:44	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	91	70 - 135	%		
o-Terphenyl	94	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 18:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 18:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 18:01	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 18:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 18:01	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 18:01	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 18:01	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	94	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW100-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-007

Date Collected: 09.11.18 13.42

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1640	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	789	10.0	1.72	mg/L	09.12.18 23:59		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00935	0.00400	0.000246	mg/L	09.16.18 23:56		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.16.18 23:56	U	1
Iron	7439-89-6	0.0583	0.100	0.0227	mg/L	09.16.18 23:56	J	1
Manganese	7439-96-5	0.253	0.00200	0.000199	mg/L	09.16.18 23:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW076SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-008

Date Collected: 09.11.18 14.02

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1850	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	583	10.0	1.72	mg/L	09.13.18 00:08		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0130	0.00400	0.000246	mg/L	09.17.18 00:00		1
Chromium	7440-47-3	0.0137	0.00400	0.000525	mg/L	09.17.18 00:00		1
Iron	7439-89-6	0.0231	0.100	0.0227	mg/L	09.17.18 00:00	J	1
Manganese	7439-96-5	0.000582	0.00200	0.000199	mg/L	09.17.18 00:00	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00580	0.0100	0.00273	mg/L	09.12.18 09:45	J	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW075SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-009

Date Collected: 09.11.18 14.12

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1670	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	399	5.00	0.858	mg/L	09.13.18 21:05		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0152	0.00400	0.000246	mg/L	09.17.18 00:03		1
Chromium	7440-47-3	0.0135	0.00400	0.000525	mg/L	09.17.18 00:03		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:03	U	1
Manganese	7439-96-5	0.000321	0.00200	0.000199	mg/L	09.17.18 00:03	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00660	0.0100	0.00273	mg/L	09.12.18 09:45	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW084SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-010

Date Collected: 09.11.18 14.23

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3060	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1370	25.0	4.29	mg/L	09.13.18 21:16		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00938	0.00400	0.000246	mg/L	09.17.18 00:06		1
Chromium	7440-47-3	0.0168	0.00400	0.000525	mg/L	09.17.18 00:06		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:06	U	1
Manganese	7439-96-5	0.00290	0.00200	0.000199	mg/L	09.17.18 00:06		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00860	0.0100	0.00273	mg/L	09.12.18 11:30	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW085SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-011

Date Collected: 09.11.18 14.32

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1650	25.0	4.29	mg/L	09.13.18 21:27		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0140	0.00400	0.000246	mg/L	09.17.18 00:09		1
Chromium	7440-47-3	0.0258	0.00400	0.000525	mg/L	09.17.18 00:09		1
Iron	7439-89-6	0.177	0.100	0.0227	mg/L	09.17.18 00:09		1
Manganese	7439-96-5	0.115	0.00200	0.000199	mg/L	09.17.18 00:09		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00280	0.0100	0.00273	mg/L	09.12.18 11:30	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW086SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-012

Date Collected: 09.11.18 14.47

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3110	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1260	25.0	4.29	mg/L	09.13.18 21:39		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0123	0.00400	0.000246	mg/L	09.17.18 00:19		1
Chromium	7440-47-3	0.0340	0.00400	0.000525	mg/L	09.17.18 00:19		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:19	U	1
Manganese	7439-96-5	0.00153	0.00200	0.000199	mg/L	09.17.18 00:19	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0255	0.0100	0.00273	mg/L	09.12.18 11:30		1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP03-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-013

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1670	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	641	10.0	1.72	mg/L	09.13.18 21:50		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00524	0.00400	0.000246	mg/L	09.17.18 00:22		1
Chromium	7440-47-3	0.000605	0.00400	0.000525	mg/L	09.17.18 00:22	J	1
Iron	7439-89-6	0.156	0.100	0.0227	mg/L	09.17.18 00:22		1
Manganese	7439-96-5	0.553	0.00200	0.000199	mg/L	09.17.18 00:22		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP03-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-013

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 02:03	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	96	70 - 135	%		
o-Terphenyl	97	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 19:07	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 19:07	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 19:07	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 19:07	U	1
o-Xylene	95-47-6	0.00319	0.00200	0.000642	mg/L	09.12.18 19:07		1
Total Xylenes	1330-20-7	0.00319	0.00200	0.000630	mg/L	09.12.18 19:07		1
Total BTEX		0.00319	0.00200	0.000367	mg/L	09.12.18 19:07		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	85	70 - 130	%		
4-Bromofluorobenzene	117	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP07-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-014

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1730	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	865	10.0	1.72	mg/L	09.13.18 22:01		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00906	0.00400	0.000246	mg/L	09.17.18 00:25		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.17.18 00:25	U	1
Iron	7439-89-6	0.0569	0.100	0.0227	mg/L	09.17.18 00:25	J	1
Manganese	7439-96-5	0.223	0.00200	0.000199	mg/L	09.17.18 00:25		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order # **598921**

Page **1** of **3**

Contact & Company Name: Brett Krehbiel Arcadis		Telephone: 916-786-0320		Preservative: Filtered (✓) ☒ E ☒ E	
Address: 101 Creekside Ridge Court, Suite 200		Fax: 916-786-0366		# of Containers 1 1 3 4 4	
City Roseville		State CA		Zip 95678	
E-mail Address: brett.krehbiel@arcadis.com		Project #: B0048789.0004			
Project Name/Location (City, State): Chevron N. Eunice		Sample's Printed Name: <i>Dery Longwell</i>			
Sample ID		Collection Date		Type (✓) Matrix	
		Time		Grab	
MW0718A-W-180912		3/21/18 0914		X W	
MW0745A-W-180912		3/21/18 0926		X W	
MW0565A-W-180912		3/21/18 0920		X W	
MW0558A-W-180912		3/21/18 0854		X W	
MW0665A-W-180912		3/21/18 1005		X W	
MW0735A-W-180912		3/21/18 1016		X W	
MW0725A-W-180912		3/21/18 1135		X W	
MW071A-W-180912		3/21/18 1149		X W	
MW0503A-W-180912		3/21/18 1159		X W	
MW0515A-W-180912		3/21/18 1211		X W	
MW0795A-W-180912		3/21/18 1225		X W	
MW0545A-W-180912		3/21/18 1242		X W	
DUP04-W-180912		3/21/18 1244		X W	
DUP05-W-180912		3/21/18 1244		X W	

Special Instructions/Comments:

☐ Special QA/QC instructions (✓):

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name: Xenco	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: <i>Dery Longwell</i>	Signature: <i>Dery Longwell</i>	Printed Name: <i>Dery Longwell</i>	Signature: <i>Dery Longwell</i>	Printed Name: <i>Dery Longwell</i>	Signature: <i>Dery Longwell</i>	Printed Name: <i>Katie Lane</i>	Signature: <i>Katie Lane</i>
Cooler packed with ice (✓)		Firm: Arcadis		Firm: Xenco		Firm: Xenco		Firm: Xenco	
Sample Receipt: 2000030	Condition/Cooler Temp. 32.0	Date/Time: 08/21/18 17:08		Date/Time: 08/21/18 17:08		Date/Time: 08/21/18 17:08		Date/Time: 08/21/18 17:08	
Shipping Tracking #:									

20730826 CoC AR Form 08.27.2015

Distribution:

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK - Retained by Arcadis



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order # 598921

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City: Roseville State: CA Zip: 95678 Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Preservative Filtered (✓) ☒ E ☒ E # of Containers 1 1 3 4 Container Information					
Send Results to: Project Name/Location (City, State): Chevron N. Eunice Project #: 80048789.0004 Sample's Printed Name: <i>Darryl Schongard</i> Sample's Signature: <i>[Signature]</i>		PARAMETER ANALYSIS & METHOD BTEX 8021B TPH GRO & DRO 8015B Dissolved As, Mn, Fe, Cr 6010B Dissolved Hex Chromium 7196 Chloride & TDS					
Sample ID	Collection Date	Time	Type (✓)	Comp	Grab	Matrix	
MW0525A-N-180912	9/12/12	1809	X			W	
MW0495A-N-180912	9/12/12	1320	X			W	
MW0485A-N-180912	9/12/12	1332	X			W	
MW0481A-N-180912	9/12/12	1347	X			W	
MW0482A-N-180912	9/12/12	1403	X			W	
MW0483A-N-180912	9/12/12	1424	X			W	
MW0484A-N-180912	9/12/12	1443	X			W	
MW0485A-N-180912	9/12/12	1502	X			W	
<i>[Large handwritten signature/initials across the table]</i>							
Special Instructions/Comments: MW0575A-W-180912 9/12/18 11:35 ☐ Special QA/QC Instructions (✓):							
Laboratory Information and Receipt Lab Name: Xenco Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact Sample Receipt: 880.0 3.0 Condition/Cooler Temp: 30 Shipping Tracking #: 5603003741-		Relinquished By Printed Name: <i>[Signature]</i> Signature: <i>[Signature]</i> Firm: Arcadis Date/Time: 9/12/18 1308		Received By Printed Name: <i>[Signature]</i> Signature: <i>[Signature]</i> Firm: Xenco Date/Time: 9/12/18 1900		Relinquished By Printed Name: <i>[Signature]</i> Signature: <i>[Signature]</i> Firm: Xenco Date/Time: 9/12/18 1900	
Laboratory Received By Printed Name: _____ Signature: _____ Firm: _____ Date/Time: _____		Distribution: WHITE - Laboratory returns with results YELLOW - Lab copy PINK - Retained by Arcadis					

Keys

Preservation Key:
 A. H₂SO₄
 B. HCl
 C. HNO₃
 D. NaOH
 E. None
 F. Other: _____
 G. Other: _____
 H. Other: _____

Container Information Key:
 1. 40 ml Vial
 2. 1 L Amber
 3. 250 ml Plastic
 4. 500 ml Plastic
 5. Encore
 6. 2 oz. Glass
 7. 4 oz. Glass
 8. 8 oz. Glass
 9. Other: _____
 10. Other: _____

Matrix Key:
 SE - Sediment
 SO - Soil
 SI - Sludge
 W - Water
 T - Tissue
 NL - NAPL/Oil
 SW - Sample Wipe
 Other: _____

REMARKS



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW071SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-001

Date Collected: 09.12.18 09.11

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1580	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	613	5.00	0.858	mg/L	09.14.18 04:28		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00951	0.00400	0.000246	mg/L	09.17.18 00:28		1
Chromium	7440-47-3	0.00142	0.00400	0.000525	mg/L	09.17.18 00:28	J	1
Iron	7439-89-6	0.100	0.100	0.0227	mg/L	09.17.18 00:28	J	1
Manganese	7439-96-5	0.293	0.00200	0.000199	mg/L	09.17.18 00:28		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW074SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-002

Date Collected: 09.12.18 09.26

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1510	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	376	5.00	0.858	mg/L	09.14.18 04:39		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0152	0.00400	0.000246	mg/L	09.17.18 00:31		1
Chromium	7440-47-3	0.00517	0.00400	0.000525	mg/L	09.17.18 00:31		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:31	U	1
Manganese	7439-96-5	0.000226	0.00200	0.000199	mg/L	09.17.18 00:31	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW056SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-003

Date Collected: 09.12.18 09.42

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3380	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	25.0	4.29	mg/L	09.14.18 04:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0155	0.00400	0.000246	mg/L	09.17.18 00:35		1
Chromium	7440-47-3	0.417	0.00400	0.000525	mg/L	09.17.18 00:35		1
Iron	7439-89-6	0.0257	0.100	0.0227	mg/L	09.17.18 00:35	J	1
Manganese	7439-96-5	0.000575	0.00200	0.000199	mg/L	09.17.18 00:35	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.401	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW055SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-004

Date Collected: 09.12.18 09.54

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1660	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	622	10.0	1.72	mg/L	09.14.18 05:24		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00784	0.00400	0.000246	mg/L	09.17.18 00:38		1
Chromium	7440-47-3	0.171	0.00400	0.000525	mg/L	09.17.18 00:38		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:38	U	1
Manganese	7439-96-5	0.000439	0.00200	0.000199	mg/L	09.17.18 00:38	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.166	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW066SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-005

Date Collected: 09.12.18 10.05

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2350	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	884	10.0	1.72	mg/L	09.14.18 17:06		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00987	0.00400	0.000246	mg/L	09.17.18 00:41		1
Chromium	7440-47-3	0.0186	0.00400	0.000525	mg/L	09.17.18 00:41		1
Iron	7439-89-6	0.0408	0.100	0.0227	mg/L	09.17.18 00:41	J	1
Manganese	7439-96-5	0.115	0.00200	0.000199	mg/L	09.17.18 00:41		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0137	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW073SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-006

Date Collected: 09.12.18 10.16

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	965	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	229	5.00	0.858	mg/L	09.14.18 17:14		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0112	0.00400	0.000246	mg/L	09.18.18 15:36		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 15:36	U	1
Iron	7439-89-6	0.231	0.100	0.0227	mg/L	09.18.18 15:36		1
Manganese	7439-96-5	0.00136	0.00200	0.000199	mg/L	09.18.18 15:36	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW072SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-007

Date Collected: 09.12.18 11.35

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1090	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	238	5.00	0.858	mg/L	09.14.18 17:21		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0179	0.00400	0.000246	mg/L	09.18.18 15:40		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 15:40	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:40	U	1
Manganese	7439-96-5	0.000362	0.00200	0.000199	mg/L	09.18.18 15:40	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW021A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-008

Date Collected: 09.12.18 11.48

Date Received: 09.12.18 19.00

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	09.18.18 15:43		1
Chromium	7440-47-3	0.00352	0.00400	0.000525	mg/L	09.18.18 15:43	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:43	U	1
Manganese	7439-96-5	0.0108	0.00200	0.000199	mg/L	09.18.18 15:43		1

Sample Id: **MW021A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-008

Date Collected: 09.12.18 11.48

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5170	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2330	25.0	4.29	mg/L	09.14.18 17:29		50

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW050SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-009

Date Collected: 09.12.18 11.59

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3580	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1510	25.0	4.29	mg/L	09.14.18 17:36		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00822	0.00400	0.000246	mg/L	09.18.18 15:46		1
Chromium	7440-47-3	0.442	0.00400	0.000525	mg/L	09.18.18 15:46		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:46	U	1
Manganese	7439-96-5	0.0204	0.00200	0.000199	mg/L	09.18.18 15:46		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.405	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW051SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-010

Date Collected: 09.12.18 12.11

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3300	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1120	25.0	4.29	mg/L	09.14.18 17:43		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	09.18.18 15:49		1
Chromium	7440-47-3	0.799	0.00400	0.000525	mg/L	09.18.18 15:49		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:49	U	1
Manganese	7439-96-5	0.00236	0.00200	0.000199	mg/L	09.18.18 15:49		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.668	0.0500	0.0136	mg/L	09.13.18 08:05		5



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW079SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-011

Date Collected: 09.12.18 12.25

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1140	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	270	5.00	0.858	mg/L	09.14.18 17:51		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00709	0.00400	0.000246	mg/L	09.18.18 15:52		1
Chromium	7440-47-3	0.000775	0.00400	0.000525	mg/L	09.18.18 15:52	J	1
Iron	7439-89-6	0.176	0.100	0.0227	mg/L	09.18.18 15:52		1
Manganese	7439-96-5	0.0406	0.00200	0.000199	mg/L	09.18.18 15:52		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW054SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-012

Date Collected: 09.12.18 12.42

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	800	10.0	1.72	mg/L	09.14.18 17:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0107	0.00400	0.000246	mg/L	09.18.18 15:56		1
Chromium	7440-47-3	0.131	0.00400	0.000525	mg/L	09.18.18 15:56		1
Iron	7439-89-6	0.103	0.100	0.0227	mg/L	09.18.18 15:56		1
Manganese	7439-96-5	0.00315	0.00200	0.000199	mg/L	09.18.18 15:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.115	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP04-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-013

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.14.18 18:06		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0108	0.00400	0.000246	mg/L	09.18.18 15:59		1
Chromium	7440-47-3	0.129	0.00400	0.000525	mg/L	09.18.18 15:59		1
Iron	7439-89-6	0.0672	0.100	0.0227	mg/L	09.18.18 15:59	J	1
Manganese	7439-96-5	0.00235	0.00200	0.000199	mg/L	09.18.18 15:59		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.118	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP05-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-014

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1030	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	269	5.00	0.858	mg/L	09.14.18 18:13		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00707	0.00400	0.000246	mg/L	09.18.18 16:02		1
Chromium	7440-47-3	0.000783	0.00400	0.000525	mg/L	09.18.18 16:02	J	1
Iron	7439-89-6	0.184	0.100	0.0227	mg/L	09.18.18 16:02		1
Manganese	7439-96-5	0.0420	0.00200	0.000199	mg/L	09.18.18 16:02		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW052SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-015

Date Collected: 09.12.18 13.09

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3020	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1400	25.0	4.29	mg/L	09.14.18 18:43		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0131	0.00400	0.000246	mg/L	09.18.18 16:18		1
Chromium	7440-47-3	0.242	0.00400	0.000525	mg/L	09.18.18 16:18		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:18	U	1
Manganese	7439-96-5	0.000660	0.00200	0.000199	mg/L	09.18.18 16:18	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.222	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW049SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-016

Date Collected: 09.12.18 13.20

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2960	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1300	25.0	4.29	mg/L	09.14.18 18:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	09.18.18 16:21		1
Chromium	7440-47-3	0.188	0.00400	0.000525	mg/L	09.18.18 16:21		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:21	U	1
Manganese	7439-96-5	0.000414	0.00200	0.000199	mg/L	09.18.18 16:21	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.171	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW048SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-017

Date Collected: 09.12.18 13.32

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1960	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	583	10.0	1.72	mg/L	09.14.18 18:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0119	0.00400	0.000246	mg/L	09.18.18 16:24		1
Chromium	7440-47-3	0.453	0.00400	0.000525	mg/L	09.18.18 16:24		1
Iron	7439-89-6	0.136	0.100	0.0227	mg/L	09.18.18 16:24		1
Manganese	7439-96-5	0.000896	0.00200	0.000199	mg/L	09.18.18 16:24	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.404	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW041A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-018

Date Collected: 09.12.18 13.44

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	403	5.00	0.858	mg/L	09.15.18 00:47		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	09.18.18 16:28		1
Chromium	7440-47-3	0.206	0.00400	0.000525	mg/L	09.18.18 16:28		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:28	U	1
Manganese	7439-96-5	0.00121	0.00200	0.000199	mg/L	09.18.18 16:28	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.167	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW062A-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-019

Date Collected: 09.12.18 14.03

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	497	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	57.9	2.50	0.429	mg/L	09.15.18 00:55		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0240	0.00400	0.000246	mg/L	09.18.18 16:31		1
Chromium	7440-47-3	0.00213	0.00400	0.000525	mg/L	09.18.18 16:31	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:31	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 16:31	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW063A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-020

Date Collected: 09.12.18 14.14

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	472	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.7	2.50	0.429	mg/L	09.15.18 01:02		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0233	0.00400	0.000246	mg/L	09.18.18 16:34		1
Chromium	7440-47-3	0.00162	0.00400	0.000525	mg/L	09.18.18 16:34	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:34	U	1
Manganese	7439-96-5	0.000592	0.00200	0.000199	mg/L	09.18.18 16:34	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW024A-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-021

Date Collected: 09.12.18 14.43

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2420	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	901	10.0	1.72	mg/L	09.15.18 01:10		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0125	0.00400	0.000246	mg/L	09.18.18 16:37		1
Chromium	7440-47-3	0.579	0.00400	0.000525	mg/L	09.18.18 16:37		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:37	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 16:37	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.477	0.0500	0.0136	mg/L	09.13.18 11:15		5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW070A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-022

Date Collected: 09.12.18 15.02

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1120	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	387	5.00	0.858	mg/L	09.15.18 01:39		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0145	0.00400	0.000246	mg/L	09.18.18 20:02		1
Chromium	7440-47-3	0.000838	0.00400	0.000525	mg/L	09.18.18 20:02	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 20:02	U	1
Manganese	7439-96-5	0.000481	0.00200	0.000199	mg/L	09.18.18 20:02	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 11:15	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **Dup02-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-023

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2310	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	894	10.0	1.72	mg/L	09.15.18 01:47		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0126	0.00400	0.000246	mg/L	09.19.18 15:34		1
Chromium	7440-47-3	0.547	0.00400	0.000525	mg/L	09.19.18 15:34		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.19.18 15:34	U	1
Manganese	7439-96-5	0.000247	0.00200	0.000199	mg/L	09.19.18 15:34	J	1

Sample Id: **Dup02-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-023

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.520	0.0500	0.0136	mg/L	09.13.18 11:15	K	5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW057SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-024

Date Collected: 09.12.18 11.35

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1450	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	346	5.00	0.858	mg/L	09.15.18 01:54		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0127	0.00400	0.000246	mg/L	09.19.18 15:37		1
Chromium	7440-47-3	0.0387	0.00400	0.000525	mg/L	09.19.18 15:37		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.19.18 15:37	U	1
Manganese	7439-96-5	0.000203	0.00200	0.000199	mg/L	09.19.18 15:37	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0276	0.0100	0.00273	mg/L	09.13.18 11:15		1



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order # 599

Page 1 of 2

Contact & Company Name:		Telephone:			
Brett Krehbiel Arcadis		916-786-0320			
Address:		Fax:			
101 Creekside Ridge Court, Suite 200		916-786-0366			
City State Zip		E-mail Address:			
Roseville CA 95678		brett.krehbiel@arcadis.com			
Project #:		B0048789.0004			
Chevron N. Eunice		Sample's Signature: 			
Sample's Printed Name: <i>Brett Krehbiel</i>					
Sample ID	Collection Date	Type (✓)	Comp	Grab	Matrix
MW2028-W-180913	9/13/13 1447	X			W
MW2003-W-180913	9/13/13 1438	X			W
MW2042A-W-180913	9/13/13 1429	X			W
MW2040-W-180913	9/13/13 1421	X			W
MW2019A-W-180913	9/13/13 1409	X			W
MW2018-W-180913	9/13/13 1340	X			W
MW2020A-W-180913	9/13/13 1400	X			W
MW2029-W-180913	9/13/13 1321	X			W
MW2015A-W-180913	9/13/13 1249	X			W
MW2026-W-180913	9/13/13 1239	X			W
MW2027-W-180913	9/13/13 1229	X			W
MW2037-W-180913	9/13/13 1219	X			W
MW2068-W-180913	9/13/13 1144	X			W
MW2061-W-180913	9/13/13 1132	X			W

Preservative

Filtered (✓)

of Containers

Container Information

PARAMETER ANALYSIS & METHOD

TPH GRO & DRO

8015B

Dissolved As, Mn

Fe, Cr 6010B

Dissolved Hex

Chromium 7196

Chloride & TDS

Matrix Key:

SE - Sediment

SO - Soil

W - Water

T - Tissue

SL - Sludge

A - Air

NL - NAPL/Oil

SW - Sample Wipe

Other:

Preservation Key:

A. H₂SO₄

B. HCL

C. HNO₃

D. NaOH

E. None

F. Other:

G. Other:

H. Other:

I. Other:

Container Information Key:

1. 40 ml Vial

2. 1 L Amber

3. 250 ml Plastic

4. 500 ml Plastic

5. Encore

6. 2 oz Glass

7. 4 oz Glass

8. 8 oz Glass

9. Other:

10. Other:

REMARKS

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name:	Xenco	Printed Name:	Bryson Stoeck	Printed Name:	Bryson Stoeck	Printed Name:	Bryson Stoeck	Printed Name:	Bryson Stoeck
cooler packed with ice (✓)		Signature:	[Signature]	Signature:	[Signature]	Signature:	[Signature]	Signature:	[Signature]
Specify Turnaround Requirements:	Standard	Firm:	Xenco	Firm/Courier:	Xenco	Firm:	Xenco	Firm:	Xenco
Shipping Tracking #:	1200-03-0	Date/Time:	5/13/18 16:57	Date/Time:	5/13/18 16:57	Date/Time:	5/13/18 19:02	Date/Time:	5/13/18 19:02

Distribution:

WHITE² — Laboratory returns with results

VEI10W - 1 ab cobu

PINK Retained by Amedico

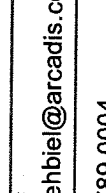

ARCADIS

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Page 2 of 2
Lab Work Order # 204

Lab Work Order # 599078

Contact & Company Name: Brett Krehbiel Arcadis		Telephone: 916-786-0320		Preservatives ☐ Filtered (✓)		B		C		E	
Address: 101 Creekside Ridge Court, Suite 200		Fax: 916-786-0366		# of Containers 1		1		3		4	
City Roseville		State CA		Zip 95678		Container Information 1		3		4	
E-mail Address: brett.krehbiel@arcadis.com		Project #: B0048789.0004		Sample's Signature: 		TPH GRO & DRO 8015B		Dissolved As. Mn. Fe, Cr 6010B		Chloride & TDS	
Project Name/Location (City, State): Chevron N. Eunice		Sample ID		Collection		Date		Type (✓)		Matrix	
		M20095-W-180913		8/13/18		11:17		X		W	
		M20030-W-180913		8/13/18		09:58		X		W	
		M20031-W-180913		8/13/18		10:30		X		W	
		M20060-W-180913		8/13/18		11:03		X		W	
		M20059-W-180913		8/13/18		10:10		X		W	
		M20059-W-180913		8/13/18		10:41		X		W	
		M20023-W-180913		8/13/18		10:20		X		W	
Special Instructions/Comments: SE											
Special QA/QC Instructions (✓):											

Container Information Key:

1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:

SE - Sediment
 SO - Soil
 W - Water
 T - Tissue

Container Information Key:

NL - NAP/OLI
 SL - Sample Wipe
 Other: _____

REMARKS

Lab Name:
Xenco

☐ Cooler packed with ice (✓)

Specify Turnaround Requirements:
Standard 24H

Shipping Tracking #:

Laboratory Information and Receipt

Coaster Custody Seal (✓)

☒ Intact ☐ Not Intact

Sample Receipt:
 Condition/Cooler Temp: 20.00 3.0

Relinquished By

Printed Name: Terry S. Shaw

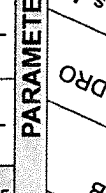
Signature: 

Firm/Counter: Arcadis

Date/Time: 8/13/18 16:57

Received By

Printed Name: Winston N. Shaw

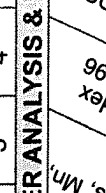
Signature: 

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shaw

Signature: 

Firm/Counter: Arcadis

Date/Time: 8/13/18 16:57

Received By

Printed Name: Winston N. Shaw

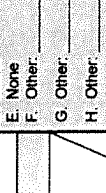
Signature: 

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shaw

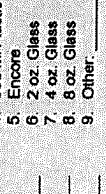
Signature: 

Firm/Counter: Arcadis

Date/Time: 8/13/18 16:57

Received By

Printed Name: Winston N. Shaw

Signature: 

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shaw

Signature: 

Firm/Counter: Arcadis

Date/Time: 8/13/18 16:57

Received By

Printed Name: Winston N. Shaw

Signature: 

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW088M-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-001

Date Collected: 09.13.18 14.47

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3200	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1760	25.0	4.29	mg/L	09.18.18 18:46		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0234	0.00400	0.000246	mg/L	09.18.18 16:12		1
Chromium	7440-47-3	0.157	0.00400	0.000525	mg/L	09.18.18 16:12		1
Iron	7439-89-6	1.99	0.100	0.0227	mg/L	09.18.18 16:12		1
Manganese	7439-96-5	0.994	0.0200	0.00199	mg/L	11.08.18 14:15	D	10

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW013-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-002

Date Collected: 09.13.18 14.38

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2810	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	692	10.0	1.72	mg/L	09.18.18 18:56		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00757	0.00400	0.000246	mg/L	09.18.18 16:15		1
Chromium	7440-47-3	1.76	0.00400	0.000525	mg/L	09.18.18 16:15		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:15	U	1
Manganese	7439-96-5	0.000747	0.00200	0.000199	mg/L	09.18.18 16:15	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.84	0.0500	0.0136	mg/L	09.14.18 07:20		5



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW040A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-003

Date Collected: 09.13.18 14.29

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	497	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.6	2.50	0.429	mg/L	09.18.18 19:07		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.0200	0.00123	mg/L	09.19.18 17:20	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:20	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:20	U	5
Manganese	7439-96-5	0.00163	0.0100	0.000993	mg/L	09.19.18 17:20	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW010-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-004

Date Collected: 09.13.18 14.21

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4990	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2550	25.0	4.29	mg/L	09.18.18 19:17		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00939	0.0200	0.00123	mg/L	09.19.18 17:23	J	5
Chromium	7440-47-3	0.0228	0.0200	0.00262	mg/L	09.19.18 17:23		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:23	U	5
Manganese	7439-96-5	0.00206	0.0100	0.000993	mg/L	09.19.18 17:23	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0120	0.0100	0.00273	mg/L	09.14.18 07:20		1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW019A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-005

Date Collected: 09.13.18 14.09

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1170	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	291	5.00	0.858	mg/L	09.18.18 19:48		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.0200	0.00123	mg/L	09.19.18 17:26	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:26	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:26	U	5
Manganese	7439-96-5	0.0118	0.0100	0.000993	mg/L	09.19.18 17:26		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW018-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-006

Date Collected: 09.13.18 13.46

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2210	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	528	10.0	1.72	mg/L	09.18.18 19:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00937	0.0200	0.00123	mg/L	09.19.18 17:29	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:29	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:29	U	5
Manganese	7439-96-5	0.00220	0.0100	0.000993	mg/L	09.19.18 17:29	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW020A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-007

Date Collected: 09.13.18 14.00

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2370	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	961	10.0	1.72	mg/L	09.18.18 20:09		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0112	0.0200	0.00123	mg/L	09.19.18 17:32	J	5
Chromium	7440-47-3	0.00675	0.0200	0.00262	mg/L	09.19.18 17:32	J	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:32	U	5
Manganese	7439-96-5	0.00217	0.0100	0.000993	mg/L	09.19.18 17:32	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW099-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-008

Date Collected: 09.13.18 13.21

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	496	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	64.6	2.50	0.429	mg/L	09.18.18 20:19		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00898	0.0200	0.00123	mg/L	09.19.18 17:36	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:36	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:36	U	5
Manganese	7439-96-5	0.219	0.0100	0.000993	mg/L	09.19.18 17:36		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW015A-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-009

Date Collected: 09.13.18 12.49

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	9850	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	5950	25.0	4.29	mg/L	09.18.18 20:29		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00882	0.0200	0.00123	mg/L	09.19.18 17:39	J	5
Chromium	7440-47-3	0.00534	0.0200	0.00262	mg/L	09.19.18 17:39	J	5
Iron	7439-89-6	0.164	0.500	0.114	mg/L	09.19.18 17:39	J	5
Manganese	7439-96-5	0.0197	0.0100	0.000993	mg/L	09.19.18 17:39		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW026-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-010

Date Collected: 09.13.18 12.39

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	860	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	129	2.50	0.429	mg/L	09.18.18 21:11		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00774	0.0200	0.00123	mg/L	09.19.18 17:42	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:42	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:42	U	5
Manganese	7439-96-5	0.00160	0.0100	0.000993	mg/L	09.19.18 17:42	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW027-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-011

Date Collected: 09.13.18 12.28

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	355	5.00	0.858	mg/L	09.18.18 21:21		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00682	0.0200	0.00123	mg/L	09.19.18 17:45	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:45	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:45	U	5
Manganese	7439-96-5	0.00133	0.0100	0.000993	mg/L	09.19.18 17:45	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW032-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-012

Date Collected: 09.13.18 12.19

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1190	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	309	5.00	0.858	mg/L	09.18.18 21:52		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00389	0.0200	0.00123	mg/L	09.19.18 17:58	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:58	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:58	U	5
Manganese	7439-96-5	0.00249	0.0100	0.000993	mg/L	09.19.18 17:58	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW068-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-013

Date Collected: 09.13.18 11.44

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	18000	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	11700	50.0	8.58	mg/L	09.18.18 22:03		100

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0180	0.0200	0.00123	mg/L	09.19.18 18:01	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:01	U	5
Iron	7439-89-6	0.345	0.500	0.114	mg/L	09.19.18 18:01	J	5
Manganese	7439-96-5	2.37	0.0100	0.000993	mg/L	09.19.18 18:01		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW061-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-014

Date Collected: 09.13.18 11.32

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3830	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	25.0	4.29	mg/L	09.18.18 22:13		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.0200	0.00123	mg/L	09.19.18 18:04	J	5
Chromium	7440-47-3	1.56	0.0200	0.00262	mg/L	09.19.18 18:04		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:04	U	5
Manganese	7439-96-5	0.0360	0.0100	0.000993	mg/L	09.19.18 18:04		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.44	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW095-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-015

Date Collected: 09.13.18 11.17

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3650	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1380	25.0	4.29	mg/L	09.18.18 22:23		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00984	0.0200	0.00123	mg/L	09.19.18 18:08	J	5
Chromium	7440-47-3	3.93	0.0200	0.00262	mg/L	09.19.18 18:08		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:08	U	5
Manganese	7439-96-5	0.140	0.0100	0.000993	mg/L	09.19.18 18:08		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.62	0.200	0.0545	mg/L	09.14.18 08:15		20



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW030-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-016

Date Collected: 09.13.18 09.58

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	726	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	245	2.50	0.429	mg/L	09.18.18 22:34		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0189	0.0200	0.00123	mg/L	09.19.18 18:11	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:11	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:11	U	5
Manganese	7439-96-5	0.00159	0.0100	0.000993	mg/L	09.19.18 18:11	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW031-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-017

Date Collected: 09.13.18 10.30

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	832	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	233	5.00	0.858	mg/L	09.18.18 22:44		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.102	0.0200	0.00123	mg/L	09.19.18 18:14		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:14	U	5
Iron	7439-89-6	4.17	0.500	0.114	mg/L	09.19.18 18:14		5
Manganese	7439-96-5	1.02	0.0100	0.000993	mg/L	09.19.18 18:14		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW060-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: ~~599078-018~~

Date Collected: 09.13.18 11.03

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3470	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1560	25.0	4.29	mg/L	09.18.18 22:54		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00342	0.0200	0.00123	mg/L	09.19.18 18:17	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:17	U	5
Iron	7439-89-6	0.765	0.500	0.114	mg/L	09.19.18 18:17		5
Manganese	7439-96-5	10.5	0.100	0.00993	mg/L	11.08.18 14:12	D	50

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW059-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-019

Date Collected: 09.13.18 10.10

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3070	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	904	25.0	4.29	mg/L	09.19.18 00:27		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.0200	0.00123	mg/L	09.19.18 18:20	J	5
Chromium	7440-47-3	0.556	0.0200	0.00262	mg/L	09.19.18 18:20		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:20	U	5
Manganese	7439-96-5	0.00308	0.0100	0.000993	mg/L	09.19.18 18:20	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.469	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW069-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-020

Date Collected: 09.13.18 10.41

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1990	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	804	10.0	1.72	mg/L	09.19.18 00:38		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0149	0.00400	0.000246	mg/L	09.18.18 18:26		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 18:26	U	1
Iron	7439-89-6	0.563	0.100	0.0227	mg/L	09.18.18 18:26		1
Manganese	7439-96-5	0.774	0.00200	0.000199	mg/L	09.18.18 18:26		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 09:00	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW023-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-021

Date Collected: 09.13.18 10.20

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	785	25.0	4.29	mg/L	09.19.18 00:48		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00933	0.00400	0.000246	mg/L	09.18.18 18:54		1
Chromium	7440-47-3	1.72	0.00400	0.000525	mg/L	09.18.18 18:54		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 18:54	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 18:54	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.43	0.0500	0.0136	mg/L	09.14.18 08:15		5



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order #

Page 7 of 7

Contact & Company Name: Brett Krehbiel Arcadis		Telephone: 916-786-0320	
Address: 101 Creekside Ridge Court, Suite 200		Fax: 916-786-0366	
City: Roseville	State: CA	Zip: 95678	
E-mail Address: brett.krehbiel@arcadis.com			
Project Name/Location (City, State): Chevron N. Eunice			
Project #: B0048789.0004			
Sampler's Printed Name: <i>[Signature]</i>			
Sampler's Signature: <i>[Signature]</i>			
Sample ID	Collection Date	Type (✓) Comp	Matrix
MW002A-W-180914	9/14/18 0940	X	W
MW004A-W-180914	9/14/18 1014	X	W
MW002A-W-180914	9/14/18 1024	X	W
DUP-1-W-180914	9/14/18	X	W
MW006A-W-180914	9/14/18 1113	X	W
MW0047-W-180914	9/14/18 0930	X	W
MW0008M-W-180914	9/14/18 0950	X	W
MW0095A-W-180914	9/14/18 0926	X	W
MW004A-W-180914	9/14/18 0917	X	W
DUP-1-W-180914	9/14/18	X	W
I-W0023-W-180914	9/14/18 0850	X	W
MW00935A-W-180914	9/14/18 0904	X	W
Special Instructions/Comments: Temp. 5.3 R8 0.0			
☐ Special QA/QC Instructions (*)			
PARAMETER ANALYSIS & METHOD			
Preservative	B	C	E
Filtered (✓)		✓	✓
# of Containers	1	3	4
Container Information			
BTX 8021B			
TPH GRO & DRO			
Dissolved As, Mn, Fe, Cr 6010B			
Dissolved Hex Chromium 7196			
Chloride & TDS			
REMARKS			
Keys			
Container Information Key:			
1. 40 ml Vial			
2. 1 L Amber			
3. 250 ml Plastic			
4. 500 ml Plastic			
5. Encore			
6. 2 oz Glass			
7. 4 oz Glass			
8. 8 oz Glass			
9. Other			
10. Other			
Matrix Key:			
SE - Sediment			
SO - Soil			
W - Water			
T - Tissue			
NL - NAPL/Oil			
SW - Sample Wipe			
A - Air			
Other:			
Laboratory Information and Receipt			
Lab Name:	Relinquished By	Received By	Laboratory Received By
Xenco	Printed Name: <i>[Signature]</i>	Printed Name: <i>[Signature]</i>	Printed Name:
Cooler packed with ice (✓)	Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Signature:
Sample Receipt:	Firm: <i>[Signature]</i>	Firm: <i>[Signature]</i>	Firm:
Condition/Cooler Temp:	Date/Time: 9/14/18 15:14	Date/Time: 9/14/18 15:14	Date/Time:

Distribution:

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK -- Retained by Arcadis



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW007A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-001

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3040	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.19.18 01:29		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0115	0.00400	0.000246	mg/L	09.18.18 18:58		1
Chromium	7440-47-3	0.763	0.00400	0.000525	mg/L	09.18.18 18:58		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 18:58	U	1
Manganese	7439-96-5	0.000655	0.00200	0.000199	mg/L	09.18.18 18:58	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.670	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW011A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0142	0.00400	0.000246	mg/L	09.18.18 19:01		1
Chromium	7440-47-3	0.291	0.00400	0.000525	mg/L	09.18.18 19:01		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:01	U	1
Manganese	7439-96-5	0.193	0.00200	0.000199	mg/L	09.18.18 19:01		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.242	0.0100	0.00273	mg/L	09.14.18 16:00		1

Sample Id: MW011A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	646	10.0	1.72	mg/L	09.19.18 01:40		20



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW002A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-003

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3330	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1610	25.0	4.29	mg/L	09.19.18 01:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.00400	0.000246	mg/L	09.18.18 19:04		1
Chromium	7440-47-3	0.963	0.00400	0.000525	mg/L	09.18.18 19:04		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:04	U	1
Manganese	7439-96-5	0.0193	0.00200	0.000199	mg/L	09.18.18 19:04		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.796	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP01-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-004

Date Collected: 09.14.18 10.18

Date Received: 09.14.18 15.14

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0136	0.00400	0.000246	mg/L	09.18.18 19:07		1
Chromium	7440-47-3	0.277	0.00400	0.000525	mg/L	09.18.18 19:07		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:07	U	1
Manganese	7439-96-5	0.187	0.00200	0.000199	mg/L	09.18.18 19:07		1

Sample Id: **DUP01-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-004

Date Collected: 09.14.18 10.18

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2080	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	576	10.0	1.72	mg/L	09.19.18 02:00		20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.239	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW016A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-005

Date Collected: 09.14.18 10.34

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1290	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	513	5.00	0.858	mg/L	09.19.18 02:11		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00914	0.00400	0.000246	mg/L	09.18.18 19:10		1
Chromium	7440-47-3	0.00528	0.00400	0.000525	mg/L	09.18.18 19:10		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:10	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 19:10	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW047-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-006

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1950	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	276	10.0	1.72	mg/L	09.19.18 02:52		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.00400	0.000246	mg/L	09.19.18 17:55		1
Chromium	7440-47-3	0.0600	0.00400	0.000525	mg/L	09.19.18 17:55		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:14	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 19:14	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0507	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW008M-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-007

Date Collected: 09.14.18 11.13

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4600	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1350	25.0	4.29	mg/L	09.19.18 03:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00312	0.00400	0.000246	mg/L	09.18.18 19:17	J	1
Chromium	7440-47-3	0.00775	0.00400	0.000525	mg/L	09.18.18 19:17		1
Iron	7439-89-6	40.4	0.100	0.0227	mg/L	09.18.18 19:17		1
Manganese	7439-96-5	3.08	0.0400	0.00397	mg/L	11.08.18 14:09	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW089SA-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-008

Date Collected: 09.14.18 09.32

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3780	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1040	25.0	4.29	mg/L	09.19.18 08:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	09.18.18 19:26		1
Chromium	7440-47-3	1.18	0.00400	0.000525	mg/L	09.18.18 19:26		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:26	U	1
Manganese	7439-96-5	0.000448	0.00200	0.000199	mg/L	09.18.18 19:26	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.04	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW004A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-009

Date Collected: 09.14.18 09.57

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2230	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	632	10.0	1.72	mg/L	09.19.18 08:32		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0158	0.00400	0.000246	mg/L	09.18.18 19:30		1
Chromium	7440-47-3	0.515	0.00400	0.000525	mg/L	09.18.18 19:30		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:30	U	1
Manganese	7439-96-5	0.000320	0.00200	0.000199	mg/L	09.18.18 19:30	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.497	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP06-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-010

Date Collected: 09.14.18 09.26

Date Received: 09.14.18 15.14

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.18.18 19:33		1
Chromium	7440-47-3	0.383	0.00400	0.000525	mg/L	09.18.18 19:33		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:33	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 19:33	U	1

Sample Id: **DUP06-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-010

Date Collected: 09.14.18 09.26

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2880	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	638	10.0	1.72	mg/L	09.19.18 08:42		20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.269	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: IW023-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-011

Date Collected: 09.14.18 09.17

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2790	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	645	10.0	1.72	mg/L	09.19.18 08:53		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0102	0.00400	0.000246	mg/L	09.18.18 19:36		1
Chromium	7440-47-3	0.376	0.00400	0.000525	mg/L	09.18.18 19:36		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:36	U	1
Manganese	7439-96-5	0.000254	0.00200	0.000199	mg/L	09.18.18 19:36	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.307	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW093SA-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-012

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3440	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	914	25.0	4.29	mg/L	09.19.18 09:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00859	0.00400	0.000246	mg/L	09.18.18 19:39		1
Chromium	7440-47-3	0.494	0.00400	0.000525	mg/L	09.18.18 19:39		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:39	U	1
Manganese	7439-96-5	0.0190	0.00200	0.000199	mg/L	09.18.18 19:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.504	0.0500	0.0136	mg/L	09.14.18 16:00		5



Chevron North Eunice

DATA REVIEW

NORTH EUNICE, NEW MEXICO

Volatiles, TPH, Metals and Miscellaneous Analyses

SDGs # 598697, 598921, 599078 and 599188

Analyses Performed By:

Xenco Laboratories

Midland, TX

Report #29749R

Review Level: Tier II

Project: B0048789.0004



DATA REVIEW REPORT

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 598697, 598921, 599078 and 599188 for samples collected in association with the Chevron North Eunice Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	TPH	MET	MISC
598697	MW001-W-180911	598697-001	Water	09-11-2018		X		X	X	X
	MW046A-W-180911	598697-002	Water	09-11-2018		X		X	X	X
	MW045-W-180911	598697-003	Water	09-11-2018		X		X	X	X
	MW037-W-180911	598697-004	Water	09-11-2018		X		X	X	X
	MW043-W-180911	598697-005	Water	09-11-2018		X		X	X	X
	IW019-W-180911	598697-006	Water	09-11-2018		X		X	X	X
	MW100-W-180911	598697-007	Water	09-11-2018					X	X
	MW076SA-W-180911	598697-008	Water	09-11-2018					X	X
	MW075SA-W-180911	598697-009	Water	09-11-2018					X	X
	MW084SA-W-180911	598697-010	Water	09-11-2018					X	X
	MW085SA-W-180911	598697-011	Water	09-11-2018					X	X
	MW086SA-W-180911	598697-012	Water	09-11-2018					X	X
	DUP03-W-180911	598697-013	Water	09-11-2018	MW043-W-180911	X		X	X	X
	DUP07-W-180911	598697-014	Water	09-11-2018	MW100-W-180911				X	X
598921	MW071SA-W-180912	598921-001	Water	09-12-2018					X	X
	MW074SA-W-180912	598921-002	Water	09-12-2018					X	X

DATA REVIEW REPORT

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	TPH	MET	MISC
	MW056SA-W-180912	598921-003	Water	09-12-2018					X	X
	MW055SA-W-180912	598921-004	Water	09-12-2018					X	X
	MW066SA-W-180912	598921-005	Water	09-12-2018					X	X
	MW073SA-W-180912	598921-006	Water	09-12-2018					X	X
	MW072SA-W-180912	598921-007	Water	09-12-2018					X	X
	MW021A-W-180912	598921-008	Water	09-12-2018					X	X
	MW050SA-W-180912	598921-009	Water	09-12-2018					X	X
	MW051SA-W-180912	598921-010	Water	09-12-2018					X	X
	MW079SA-W-180912	598921-011	Water	09-12-2018					X	X
	MW054SA-W-180912	598921-012	Water	09-12-2018					X	X
	DUP04-W-180912	598921-013	Water	09-12-2018	MW054S A-W-180912				X	X
	DUP05-W-180912	598921-014	Water	09-12-2018	MW079S A-W-180912				X	X
	MW052SA-W-180912	598921-015	Water	09-12-2018					X	X
	MW049SA-W-180912	598921-016	Water	09-12-2018					X	X
	MW048SA-W-180912	598921-017	Water	09-12-2018					X	X
	MW041A-W-180912	598921-018	Water	09-12-2018					X	X
	MW062A-W-180912	598921-019	Water	09-12-2018					X	X
	MW063A-W-180912	598921-020	Water	09-12-2018					X	X

DATA REVIEW REPORT

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	TPH	MET	MISC
	MW024A-W-180912	598921-021	Water	09-12-2018					X	X
	MW070A-W-180912	598921-022	Water	09-12-2018					X	X
	Dup02-W-180912	598921-023	Water	09-12-2018	MW024A-W-180912				X	X
	MW057SA-W-180912	598921-024	Water	09-12-2018					X	X
599078	MW088M-W-180913	599078-001	Water	09-13-2018					X	X
	MW013-W-180913	599078-002	Water	09-13-2018					X	X
	MW040A-W-180913	599078-003	Water	09-13-2018					X	X
	MW010-W-180913	599078-004	Water	09-13-2018					X	X
	MW019A-W-180913	599078-005	Water	09-13-2018					X	X
	MW018-W-180913	599078-006	Water	09-13-2018					X	X
	MW020A-W-180913	599078-007	Water	09-13-2018					X	X
	MW099-W-180913	599078-008	Water	09-13-2018					X	X
	MW015A-W-180913	599078-009	Water	09-13-2018					X	X
	MW026-W-180913	599078-010	Water	09-13-2018					X	X
	MW027-W-180913	599078-011	Water	09-13-2018					X	X
	MW032-W-180913	599078-012	Water	09-13-2018					X	X
	MW068-W-180913	599078-013	Water	09-13-2018					X	X
	MW061-W-180913	599078-014	Water	09-13-2018					X	X
	MW095-W-180913	599078-015	Water	09-13-2018					X	X
	MW030-W-180913	599078-016	Water	09-13-2018					X	X
	MW031-W-180913	599078-017	Water	09-13-2018					X	X
	MW060-W-180913	599078-018	Water	09-13-2018					X	X
	MW059-W-180913	599078-019	Water	09-13-2018					X	X
	MW069-W-180913	599078-020	Water	09-13-2018					X	X
	MW023-W-180913	599078-021	Water	09-13-2018					X	X

DATA REVIEW REPORT

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	TPH	MET	MISC
599188	MW007A-W-180914	599188-001	Water	09-14-2018					X	X
	MW011A-W-180914	599188-002	Water	09-14-2018					X	X
	MW002A-W-180914	599188-003	Water	09-14-2018					X	X
	DUP01-W-180914	599188-004	Water	09-14-2018	MW011A-W-180914				X	X
	MW016A-W-180914	599188-005	Water	09-14-2018					X	X
	MW047-W-180914	599188-006	Water	09-14-2018					X	X
	MW008M-W-180914	599188-007	Water	09-14-2018					X	X
	MW089SA-W-180914	599188-008	Water	09-14-2018					X	X
	MW004A-W-180914	599188-009	Water	09-14-2018					X	X
	DUP06-W-180914	599188-010	Water	09-14-2018	IW023-W-180914				X	X
	IW023-W-180914	599188-011	Water	09-14-2018					X	X
	MW093SA-W-180914	599188-012	Water	09-14-2018					X	X

Notes:

VOC – Volatile Organic Compounds

SVOC – Semivolatile Organic Compounds

TPH – Total Petroleum Hydrocarbons

MET – Metals

MISC - Miscellaneous includes hexavalent chromium, chloride and total dissolved solids analysis.

DATA REVIEW REPORT**ANALYTICAL DATA PACKAGE DOCUMENTATION**

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

DATA REVIEW REPORT

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8021B and 8015 Mod. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW REPORT**VOLATILE ORGANIC COMPOUND (VOC) ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8021B	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
MW043-W-180911	1,4-Difluorobenzene	< LL but > 10%
	4-Bromofluorobenzene	AC

Notes:

LL Lower control limit

AC Acceptable

DATA REVIEW REPORT

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD was not analyzed within SDG 598697.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW043-W-180911 / DUP03-W-180911	Benzene	0.002 U	0.002 U	AC
	Ethylbenzene	0.002 U	0.002 U	AC

DATA REVIEW REPORT

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Toluene	0.002 U	0.002 U	AC
	Total BTEX	0.00347	0.00319	AC
	Total Xylenes	0.00347	0.00319	AC
	m,p-Xylenes	0.004 U	0.004 U	AC
	o-Xylene	0.00347	0.00319	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8021B	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks	X				X	
C. Trip blanks	X				X	
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate(LCSD)		X		X		
LCS/LCSD Precision (RPD)		X		X		
Matrix Spike (MS)	X				X	
Matrix Spike Duplicate(MSD)	X				X	
MS/MSD Precision (RPD)	X				X	
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	

Notes:

%R Percent recovery

RPD Relative percent difference

DATA REVIEW REPORT**TPH ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
TPH by SW846 8015B	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD was analyzed on sample location MW001-W-180911 exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

DATA REVIEW REPORT**5. Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate Analysis (LCSD)**

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW043-W-180911 / DUP03-W-180911	Diesel Range Organics	1.50 U	1.50 U	AC
	Gasoline Range Hydrocarbons	1.50 U	1.50 U	AC
	Oil Range Hydrocarbons	1.50 U	1.50 U	AC
	Total TPH	1.50 U	1.50 U	AC

Notes:

AC Acceptable

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR TPH

DRO/GRO; SW-846 8015B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
D. Method blanks		X		X	
E. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R - percent recovery

RPD - relative percent difference

DATA REVIEW REPORT

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 6020A, 7196A, EPA 300, SM 2540C. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
 - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
 - E The reported value is estimated due to the presence of interference.
 - N Spiked sample recovery is not within control limits.
 - * Duplicate analysis is not within control limits.
- Validation Qualifiers
 - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
 - UB Analyte considered non-detect at the listed value due to associated blank contamination.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW REPORT**METALS ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6020A	Water	180 days from collection to analysis	Preserved to a pH of less than 2.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis were performed on sample locations MW001-W-180911, MW070A-W-180912 and MW069-W-180913 exhibited recoveries within the control limits.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

DATA REVIEW REPORT**4. Field Duplicate Analysis**

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW011A-W-180914 / DUP01-W-180914	Arsenic	0.0142	0.0136	AC
	Chromium	0.291	0.277	AC
	Iron	0.100 U	0.100 U	AC
	Manganese	0.193	0.187	AC
MW024A-W-180912 / Dup02-W-180912	Arsenic	0.0125	0.0126	AC
	Chromium	0.579	0.547	AC
	Iron	0.100 U	0.100 U	AC
	Manganese	0.002 U	0.000247 J	AC
MW043-W-180911 / DUP03-W-180911	Arsenic	0.00508	0.00524	AC
	Chromium	0.000688	0.000605	AC
	Iron	0.152	0.156	AC
	Manganese	0.545	0.553	AC
MW054SA-W-180912 / DUP04-W-180912	Arsenic	0.0107	0.0108	AC
	Chromium	0.131	0.129	AC
	Iron	0.103	0.0672 J	AC
	Manganese	0.00315	0.00235	AC
MW079SA-W-180912 / DUP05-W-180912	Arsenic	0.00709	0.00707	AC
	Chromium	0.000705	0.000783	AC
	Iron	0.176	0.184	AC
	Manganese	0.0406	0.0420	AC
IW023-W-180914 / DUP06-W-180914	Arsenic	0.0102	0.0101	AC
	Chromium	0.376	0.383	AC
	Iron	0.100 U	0.100 U	AC
	Manganese	0.000254	0.002 U	AC
MW100-W-180911 / DUP07-W-180911	Arsenic	0.00935	0.00906	AC

DATA REVIEW REPORT

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Chromium	0.004 U	0.004 U	AC
	Iron	0.0583 J	0.0569 J	AC
	Manganese	0.253	0.223	AC

Notes:

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS/LCSD analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR METAL

METALS; SW-846 6020A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)					
Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)					
Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks	X				X
B. Method Blanks		X		X	
C. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
ICP Serial Dilution %D	X				X
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA REVIEW REPORT**GENERAL CHEMISTRY ANALYSES****1. Holding Times**

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Chloride by EPA 300.0	Water	28 days from collection to analysis	Cool to <6 °C.
Total Dissolved Solids By SM 2540C	Water	7 days from collection to analysis	Cool to <6 °C.
Hexavalent Chromium by SW-846 7196A	Water	24 hours from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the sample detection limit (SDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the SDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis for hexavalent chromium was performed on sample locations DUP07-W-180911, MW071SA-W-180912, MW079SA-W-180912, MW070A-W-180912, MW040A-W-180913, MW030-W-180913, MW069-W-180913 and MW016A-W-180914 exhibited recoveries within the control limits.

DATA REVIEW REPORT

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

The laboratory duplicate analysis was performed for total dissolved solids on sample locations MW001-W-180911, DUP07-W-180911, MW072SA-W-180912, MW057SA-W-180912, MW088M-W-180913, MW069-W-180913, MW023-W-180913 and MW007A-W-180914 exhibited RPDs within the control limits.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW011A-W-180914 / DUP01-W-180914	Hexavalent Chromium	0.242	0.239	AC
	Chloride	646	576	AC
	Total Dissolved Solids	2160	2080	AC
MW024A-W-180912 / Dup02-W-180912	Hexavalent Chromium	0.477	0.520	AC
	Chloride	901	894	AC
	Total Dissolved Solids	2420	2310	AC
MW043-W-180911 / DUP03-W-180911	Hexavalent Chromium	0.01 U	0.01 U	AC
	Chloride	610	641	AC
	Total Dissolved Solids	1620	1670	AC
MW054SA-W-180912 / DUP04-W-180912	Hexavalent Chromium	0.115	0.118	AC
	Chloride	800	801	AC
	Total Dissolved Solids	1970	1970	AC
MW079SA-W-180912 / DUP05-W-180912	Hexavalent Chromium	0.01 U	0.01 U	AC
	Chloride	270	269	AC
	Total Dissolved Solids	1140	1030	AC
IW023-W-180914 / DUP06-W-180914	Hexavalent Chromium	0.307	0.269	AC
	Chloride	645	638	AC
	Total Dissolved Solids	2790	2880	AC
MW100-W-180911 / DUP07-W-180911	Hexavalent Chromium	0.01 U	0.01 U	AC

DATA REVIEW REPORT

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Chloride	789	865	AC
	Total Dissolved Solids	1640	1730	AC

Notes:

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS/LCSD analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 300.0, SM 2540C and SW 7196A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%RSD – relative standard deviation

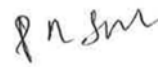
%R - percent recovery

RPD - relative percent difference

DATA REVIEW REPORT

VALIDATION PERFORMED BY: Suresh

SIGNATURE:



DATE: November 22, 2018

PEER REVIEW: Dennis Capria

DATE: November 29, 2018

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS





ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 598697

Contact & Company Name:		Telephone:		B		C		E			
Brett Krehbiel Arcadis		916-786-0320									
Address:		Fax:									
101 Creekside Ridge Court, Suite 200		916-786-0366									
City State Zip		Email Address:									
Roseville CA 95678		brett.krehbiel@arcadis.com									
Project Name/Location (City, State):		Project #:									
Chevron N. Eunice		B0048789.0004									
Sampler's Printed Name:		Sampler's Signature:									
GARY S. LONGWELL											
Sample ID	Collection Date	Time	Type (✓)	Comp	Grab	Matrix	PARAMETER ANALYSIS & METHOD				
MW2001-N-180911	09/11/18	1150	X			W	BTEX 8021B	TPH GRO & DRO 8015B	Dissolved As, Mn, Fe, Cr 6010B	Dissolved Hex Chromium 7196	Chloride & TDS
MW2046A-N-180911	09/11/18	1220	X			W					
MW2045-N-180911	09/11/18	1226	X			W					
MW2037-N-180911	09/11/18	1249	X			W					
MW2043-N-180911	09/11/18	1346	X			W					
TD2019-W-180911	09/11/18	1312	X			W					
MW2010-N-180911	09/11/18	1342	X			W					
MW2076SA-N-180911	09/11/18	1402	X			W					
MW2075SA-N-180911	09/11/18	1412	X			W					
MW2084SA-N-180911	09/11/18	1423	X			W					
MW2085SA-N-180911	09/11/18	1432	X			W					
MW2086SA-N-180911	09/11/18	1447	X			W					
DDP003-N-180911	09/11/18		X			W					
DDP007-N-180911	09/11/18		X			W					
Special Instructions/Comments:											

☐ Special QA/QC Instructions (-):

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name:	cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:
Xenco		GARY S. LONGWELL		WILSON DEAN		WILSON DEAN		JULIAN MARTINEZ	
Specify Turnaround Requirements:	Sample Receipt:	Firm:	Arcadis	Firm:	Xenco	Firm:	Xenco	Firm:	Xenco
Shipping Tracking #:	Condition/Cooler Temp. 0.3100	Date/Time:	09/11/18 16:58	Date/Time:	09/11/18 16:58	Date/Time:	09/11/18 16:58	Date/Time:	09/11/18 19:00
Distribution:		WHITE - Laboratory returns with results		YELLOW - Lab copy		PINK - Retained by Arcadis			



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW001-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-001

Date Collected: 09.11.18 11.50

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2610	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	275	10.0	1.72	mg/L	09.12.18 22:18		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00241	0.00400	0.000246	mg/L	09.16.18 23:18	J	1
Chromium	7440-47-3	0.00146	0.00400	0.000525	mg/L	09.16.18 23:18	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:18	U	1
Manganese	7439-96-5	0.584	0.00200	0.000199	mg/L	09.16.18 23:18		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW001-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-001

Date Collected: 09.11.18 11.50

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.14.18 23:25	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	99	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 16:39	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 16:39	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 16:39	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 16:39	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 16:39	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 16:39	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 16:39	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW046A-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-002

Date Collected: 09.11.18 12.20

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2980	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	704	10.0	1.72	mg/L	09.12.18 22:45		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	09.16.18 23:41		1
Chromium	7440-47-3	1.77	0.00400	0.000525	mg/L	09.16.18 23:41		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:41	U	1
Manganese	7439-96-5	0.00129	0.00200	0.000199	mg/L	09.16.18 23:41	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.67	0.100	0.0273	mg/L	09.12.18 09:45		10



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW046A-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-002

Date Collected: 09.11.18 12.20

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	09.15.18 00:24	U	1
Diesel Range Organics	C10C28DRO	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1
Oil Range Hydrocarbons	PHCG2835	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1
Total TPH	PHC635	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	91	70 - 135	%		
o-Terphenyl	92	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 17:00	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:00	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 17:00	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 17:00	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 17:00	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 17:00	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 17:00	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	70 - 130	%		
4-Bromofluorobenzene	87	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW045-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-003

Date Collected: 09.11.18 12.26

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1350	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	72.1	5.00	0.858	mg/L	09.12.18 22:54		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00213	0.00400	0.000246	mg/L	09.16.18 23:44	J	1
Chromium	7440-47-3	0.0131	0.00400	0.000525	mg/L	09.16.18 23:44		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:44	U	1
Manganese	7439-96-5	0.0710	0.00200	0.000199	mg/L	09.16.18 23:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW045-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-003

Date Collected: 09.11.18 12.26

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 00:44	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 17:20	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:20	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 17:20	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 17:20	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 17:20	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 17:20	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 17:20	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW037-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-004

Date Collected: 09.11.18 12.49

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1470	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	549	10.0	1.72	mg/L	09.12.18 23:04		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0502	0.00400	0.000246	mg/L	09.16.18 23:47		1
Chromium	7440-47-3	0.00126	0.00400	0.000525	mg/L	09.16.18 23:47	J	1
Iron	7439-89-6	7.15	0.100	0.0227	mg/L	09.16.18 23:47		1
Manganese	7439-96-5	0.0653	0.00200	0.000199	mg/L	09.16.18 23:47		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW037-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-004

Date Collected: 09.11.18 12.49

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	09.15.18 01:04	U	1
Diesel Range Organics	C10C28DRO	1.04	1.50	0.911	mg/L	09.15.18 01:04	J	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:04	U	1
Total TPH	PHC635	1.04	1.50	0.911	mg/L	09.15.18 01:04	J	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0719	0.00200	0.000408	mg/L	09.12.18 17:40		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:40	U	1
Ethylbenzene	100-41-4	0.0108	0.00200	0.000657	mg/L	09.12.18 17:40		1
m,p-Xylenes	179601-23-1	0.00593	0.00400	0.000630	mg/L	09.12.18 17:40		1
o-Xylene	95-47-6	0.00384	0.00200	0.000642	mg/L	09.12.18 17:40		1
Total Xylenes	1330-20-7	0.00977	0.00200	0.000630	mg/L	09.12.18 17:40		1
Total BTEX		0.0925	0.00200	0.000367	mg/L	09.12.18 17:40		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	119	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW043-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-005

Date Collected: 09.11.18 13.46

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1620	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	610	10.0	1.72	mg/L	09.12.18 23:13		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00508	0.00400	0.000246	mg/L	09.16.18 23:50		1
Chromium	7440-47-3	0.000688	0.00400	0.000525	mg/L	09.16.18 23:50	J	1
Iron	7439-89-6	0.152	0.100	0.0227	mg/L	09.16.18 23:50		1
Manganese	7439-96-5	0.545	0.00200	0.000199	mg/L	09.16.18 23:50		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW043-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-005

Date Collected: 09.11.18 13.46

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 01:24	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	92	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 19:28	U UJ	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 19:28	U UJ	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 19:28	U UJ	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 19:28	U UJ	1
o-Xylene	95-47-6	0.00347	0.00200	0.000642	mg/L	09.12.18 19:28	J	1
Total Xylenes	1330-20-7	0.00347	0.00200	0.000630	mg/L	09.12.18 19:28	J	1
Total BTEX		0.00347	0.00200	0.000367	mg/L	09.12.18 19:28	J	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	63	70 - 130	%		**
4-Bromofluorobenzene	94	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW019-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-006

Date Collected: 09.11.18 13.17

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	25.0	4.29	mg/L	09.12.18 23:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.16.18 23:53		1
Chromium	7440-47-3	0.757	0.00400	0.000525	mg/L	09.16.18 23:53		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.16.18 23:53	U	1
Manganese	7439-96-5	0.0349	0.00200	0.000199	mg/L	09.16.18 23:53		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.687	0.0500	0.0136	mg/L	09.12.18 09:45		5



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW019-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-006

Date Collected: 09.11.18 13.17

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 01:44	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	91	70 - 135	%		
o-Terphenyl	94	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 18:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 18:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 18:01	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 18:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 18:01	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 18:01	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 18:01	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	94	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW100-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-007

Date Collected: 09.11.18 13.42

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1640	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	789	10.0	1.72	mg/L	09.12.18 23:59		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00935	0.00400	0.000246	mg/L	09.16.18 23:56		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.16.18 23:56	U	1
Iron	7439-89-6	0.0583	0.100	0.0227	mg/L	09.16.18 23:56	J	1
Manganese	7439-96-5	0.253	0.00200	0.000199	mg/L	09.16.18 23:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW076SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-008

Date Collected: 09.11.18 14.02

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1850	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	583	10.0	1.72	mg/L	09.13.18 00:08		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0130	0.00400	0.000246	mg/L	09.17.18 00:00		1
Chromium	7440-47-3	0.0137	0.00400	0.000525	mg/L	09.17.18 00:00		1
Iron	7439-89-6	0.0231	0.100	0.0227	mg/L	09.17.18 00:00	J	1
Manganese	7439-96-5	0.000582	0.00200	0.000199	mg/L	09.17.18 00:00	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00580	0.0100	0.00273	mg/L	09.12.18 09:45	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW075SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-009

Date Collected: 09.11.18 14.12

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1670	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	399	5.00	0.858	mg/L	09.13.18 21:05		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0152	0.00400	0.000246	mg/L	09.17.18 00:03		1
Chromium	7440-47-3	0.0135	0.00400	0.000525	mg/L	09.17.18 00:03		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:03	U	1
Manganese	7439-96-5	0.000321	0.00200	0.000199	mg/L	09.17.18 00:03	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00660	0.0100	0.00273	mg/L	09.12.18 09:45	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW084SA-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-010

Date Collected: 09.11.18 14.23

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3060	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1370	25.0	4.29	mg/L	09.13.18 21:16		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00938	0.00400	0.000246	mg/L	09.17.18 00:06		1
Chromium	7440-47-3	0.0168	0.00400	0.000525	mg/L	09.17.18 00:06		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:06	U	1
Manganese	7439-96-5	0.00290	0.00200	0.000199	mg/L	09.17.18 00:06		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00860	0.0100	0.00273	mg/L	09.12.18 11:30	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW085SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-011

Date Collected: 09.11.18 14.32

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1650	25.0	4.29	mg/L	09.13.18 21:27		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0140	0.00400	0.000246	mg/L	09.17.18 00:09		1
Chromium	7440-47-3	0.0258	0.00400	0.000525	mg/L	09.17.18 00:09		1
Iron	7439-89-6	0.177	0.100	0.0227	mg/L	09.17.18 00:09		1
Manganese	7439-96-5	0.115	0.00200	0.000199	mg/L	09.17.18 00:09		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00280	0.0100	0.00273	mg/L	09.12.18 11:30	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW086SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-012

Date Collected: 09.11.18 14.47

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3110	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1260	25.0	4.29	mg/L	09.13.18 21:39		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0123	0.00400	0.000246	mg/L	09.17.18 00:19		1
Chromium	7440-47-3	0.0340	0.00400	0.000525	mg/L	09.17.18 00:19		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:19	U	1
Manganese	7439-96-5	0.00153	0.00200	0.000199	mg/L	09.17.18 00:19	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0255	0.0100	0.00273	mg/L	09.12.18 11:30		1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP03-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-013

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1670	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	641	10.0	1.72	mg/L	09.13.18 21:50		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00524	0.00400	0.000246	mg/L	09.17.18 00:22		1
Chromium	7440-47-3	0.000605	0.00400	0.000525	mg/L	09.17.18 00:22	J	1
Iron	7439-89-6	0.156	0.100	0.0227	mg/L	09.17.18 00:22		1
Manganese	7439-96-5	0.553	0.00200	0.000199	mg/L	09.17.18 00:22		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP03-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-013

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 02:03	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	96	70 - 135	%		
o-Terphenyl	97	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 19:07	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 19:07	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 19:07	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 19:07	U	1
o-Xylene	95-47-6	0.00319	0.00200	0.000642	mg/L	09.12.18 19:07		1
Total Xylenes	1330-20-7	0.00319	0.00200	0.000630	mg/L	09.12.18 19:07		1
Total BTEX		0.00319	0.00200	0.000367	mg/L	09.12.18 19:07		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	85	70 - 130	%		
4-Bromofluorobenzene	117	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP07-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-014

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1730	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	865	10.0	1.72	mg/L	09.13.18 22:01		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00906	0.00400	0.000246	mg/L	09.17.18 00:25		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.17.18 00:25	U	1
Iron	7439-89-6	0.0569	0.100	0.0227	mg/L	09.17.18 00:25	J	1
Manganese	7439-96-5	0.223	0.00200	0.000199	mg/L	09.17.18 00:25		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1

ID#:

CHAIN OF CUSTODY & LABORATORY
ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order #
598921

Contact & Company Name: Brett Krehbiel Arcadis		Telephone: 916-786-0320	Preservative Filtered (✓)		B	C	E	E
Address: 101 Creekside Ridge Court, Suite 200		Fax: 916-786-0366	# of Containers Container Information		1	1	3	4
City: Roseville State: CA Zip: 95678		E-mail Address: brett.krehbiel@arcadis.com						
Project Name/Location (City, State): Chevron N. Eunice		Project #: BQD48789.0004						
Supplier's Printed Name: <i>Nery Sharguel</i>		Sample ID	Collection Date	Type (✓) Comp Grab	Matrix			
		MW0718A-W-180912	9/12/12 09H	X	W			
		MW0745A-W-180912	9/12/12 0926	X	W			
		MW0556A-W-180912	9/12/12 0926	X	W			
		MW0558A-W-180912	9/12/12 0954	X	W			
		MW0668A-W-180912	9/12/12 1005	X	W			
		MW0733A-W-180912	9/12/12 1016	X	W			
		MW0723A-W-180912	9/12/12 1135	X	W			
		MW071A-W-180912	9/12/12 1149	X	W			
		MW0505A-W-180912	9/12/12 1157	X	W			
		MW0515A-W-180912	9/12/12 1211	X	W			
		MW0795A-W-180912	9/12/12 1235	X	W			
		MW0545A-W-180912	9/12/12 1247	X	W			
		DUP04-W-180912	9/12/12	X	W			
		DUA05-W-180912	9/12/12	X	W			
Special Instructions/Comments:		☐ Special QA/QC Instructions(✓):						
Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By
Lab Name: Xenco	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: <i>Nery Sharguel</i>	Signature: <i>[Signature]</i>	Printed Name: <i>Nery Sharguel</i>	Signature: <i>[Signature]</i>	Printed Name: <i>Katie Lowe</i>	Signature: <i>[Signature]</i>	Printed Name: <i>Katie Lowe</i>
Sample Receipt: Condition/Cooler Temp: 30	Sample Receipt: Condition/Cooler Temp: 30	Firm: Arcadis	Date/Time: 9/12/12 1708	Firm: Xenco	Date/Time: 9/12/12 1900	Firm: Xenco	Date/Time: 9/12/12 1900	Firm: Xenco
Shipping Tracking #:		Distribution: WHITE - Laboratory returns with results YELLOW - Lab Copy PINK - Retained by Arcadis						



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order #
598921

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City: Roseville State: CA Zip: 95678 Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Preservative Filtered (✓) ☒ E ☒ E # of Containers: 1 1 3 4 Container Information: 1 1 3 4							
Send Results to: Project Name/Location (City, State): Chevron N. Eunice Sample's Printed Name: <i>Dany S. Longwell</i> Sample's Signature: <i>[Signature]</i> Project #: 80048789.0004 Samples Signature: <i>[Signature]</i>		PARAMETER ANALYSIS & METHOD BTEX 8021B TPH GRO & DRO 8015B Dissolved As, Mn, Fe, Cr 6010B Dissolved Hex Chromium 7196 Chloride & TDS							
Sample ID	Collection Date	Time	Type (✓)	Comp	Grab	Matrix			
MW0525A-W-180912	9/26/12	1809	X			W			
MW0495A-W-180912	9/26/12	1320	X			W			
MW0485A-W-180912	9/26/12	1332	X			W			
MW0481A-W-180912	9/26/12	1348	X			W			
MW0482A-W-180912	9/26/12	1803	X			W			
MW0483A-W-180912	9/26/12	1824	X			W			
MW0484A-W-180912	9/26/12	1843	X			W			
MW0480A-W-180912	9/26/12	1502	X			W			
<i>[Large handwritten signature/initials across the table]</i>									
Special Instructions/Comments: MW0575A-W-180912 9/12/18 11:35 ☐ Special QA/QC Instructions (✓):									
Laboratory Information and Receipt Lab Name: Xenco Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact Sample Receipt: 880.0 3.0 Condition/Cooler Temp: 3.0 Shipping Tracking #: 5403003741-		Relinquished By Printed Name: <i>Dany S. Longwell</i> Signature: <i>[Signature]</i> Firm: Arcadis Date/Time: 9/26/12 1308		Received By Printed Name: <i>Jason Noh</i> Signature: <i>[Signature]</i> Firm: Xenco Date/Time: 9/26/12 1708		Relinquished By Printed Name: <i>Jason Noh</i> Signature: <i>[Signature]</i> Firm: Xenco Date/Time: 9/26/12 1900		Laboratory Received By Printed Name: _____ Signature: _____ Firm: _____ Date/Time: _____	



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW071SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-001

Date Collected: 09.12.18 09.11

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1580	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	613	5.00	0.858	mg/L	09.14.18 04:28		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00951	0.00400	0.000246	mg/L	09.17.18 00:28		1
Chromium	7440-47-3	0.00142	0.00400	0.000525	mg/L	09.17.18 00:28	J	1
Iron	7439-89-6	0.100	0.100	0.0227	mg/L	09.17.18 00:28	J	1
Manganese	7439-96-5	0.293	0.00200	0.000199	mg/L	09.17.18 00:28		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW074SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-002

Date Collected: 09.12.18 09.26

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1510	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	376	5.00	0.858	mg/L	09.14.18 04:39		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0152	0.00400	0.000246	mg/L	09.17.18 00:31		1
Chromium	7440-47-3	0.00517	0.00400	0.000525	mg/L	09.17.18 00:31		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:31	U	1
Manganese	7439-96-5	0.000226	0.00200	0.000199	mg/L	09.17.18 00:31	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW056SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-003

Date Collected: 09.12.18 09.42

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3380	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	25.0	4.29	mg/L	09.14.18 04:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0155	0.00400	0.000246	mg/L	09.17.18 00:35		1
Chromium	7440-47-3	0.417	0.00400	0.000525	mg/L	09.17.18 00:35		1
Iron	7439-89-6	0.0257	0.100	0.0227	mg/L	09.17.18 00:35	J	1
Manganese	7439-96-5	0.000575	0.00200	0.000199	mg/L	09.17.18 00:35	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.401	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW055SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-004

Date Collected: 09.12.18 09.54

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1660	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	622	10.0	1.72	mg/L	09.14.18 05:24		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00784	0.00400	0.000246	mg/L	09.17.18 00:38		1
Chromium	7440-47-3	0.171	0.00400	0.000525	mg/L	09.17.18 00:38		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.17.18 00:38	U	1
Manganese	7439-96-5	0.000439	0.00200	0.000199	mg/L	09.17.18 00:38	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.166	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW066SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-005

Date Collected: 09.12.18 10.05

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2350	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	884	10.0	1.72	mg/L	09.14.18 17:06		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00987	0.00400	0.000246	mg/L	09.17.18 00:41		1
Chromium	7440-47-3	0.0186	0.00400	0.000525	mg/L	09.17.18 00:41		1
Iron	7439-89-6	0.0408	0.100	0.0227	mg/L	09.17.18 00:41	J	1
Manganese	7439-96-5	0.115	0.00200	0.000199	mg/L	09.17.18 00:41		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0137	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW073SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-006

Date Collected: 09.12.18 10.16

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	965	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	229	5.00	0.858	mg/L	09.14.18 17:14		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0112	0.00400	0.000246	mg/L	09.18.18 15:36		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 15:36	U	1
Iron	7439-89-6	0.231	0.100	0.0227	mg/L	09.18.18 15:36		1
Manganese	7439-96-5	0.00136	0.00200	0.000199	mg/L	09.18.18 15:36	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW072SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-007

Date Collected: 09.12.18 11.35

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1090	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	238	5.00	0.858	mg/L	09.14.18 17:21		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0179	0.00400	0.000246	mg/L	09.18.18 15:40		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 15:40	U	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:40	U	1
Manganese	7439-96-5	0.000362	0.00200	0.000199	mg/L	09.18.18 15:40	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW021A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-008

Date Collected: 09.12.18 11.48

Date Received: 09.12.18 19.00

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	09.18.18 15:43		1
Chromium	7440-47-3	0.00352	0.00400	0.000525	mg/L	09.18.18 15:43	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:43	U	1
Manganese	7439-96-5	0.0108	0.00200	0.000199	mg/L	09.18.18 15:43		1

Sample Id: **MW021A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-008

Date Collected: 09.12.18 11.48

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5170	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2330	25.0	4.29	mg/L	09.14.18 17:29		50

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW050SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-009

Date Collected: 09.12.18 11.59

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3580	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1510	25.0	4.29	mg/L	09.14.18 17:36		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00822	0.00400	0.000246	mg/L	09.18.18 15:46		1
Chromium	7440-47-3	0.442	0.00400	0.000525	mg/L	09.18.18 15:46		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:46	U	1
Manganese	7439-96-5	0.0204	0.00200	0.000199	mg/L	09.18.18 15:46		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.405	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW051SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-010

Date Collected: 09.12.18 12.11

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3300	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1120	25.0	4.29	mg/L	09.14.18 17:43		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	09.18.18 15:49		1
Chromium	7440-47-3	0.799	0.00400	0.000525	mg/L	09.18.18 15:49		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 15:49	U	1
Manganese	7439-96-5	0.00236	0.00200	0.000199	mg/L	09.18.18 15:49		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.668	0.0500	0.0136	mg/L	09.13.18 08:05		5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW079SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-011

Date Collected: 09.12.18 12.25

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1140	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	270	5.00	0.858	mg/L	09.14.18 17:51		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00709	0.00400	0.000246	mg/L	09.18.18 15:52		1
Chromium	7440-47-3	0.000775	0.00400	0.000525	mg/L	09.18.18 15:52	J	1
Iron	7439-89-6	0.176	0.100	0.0227	mg/L	09.18.18 15:52		1
Manganese	7439-96-5	0.0406	0.00200	0.000199	mg/L	09.18.18 15:52		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW054SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-012

Date Collected: 09.12.18 12.42

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	800	10.0	1.72	mg/L	09.14.18 17:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0107	0.00400	0.000246	mg/L	09.18.18 15:56		1
Chromium	7440-47-3	0.131	0.00400	0.000525	mg/L	09.18.18 15:56		1
Iron	7439-89-6	0.103	0.100	0.0227	mg/L	09.18.18 15:56		1
Manganese	7439-96-5	0.00315	0.00200	0.000199	mg/L	09.18.18 15:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.115	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP04-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-013

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.14.18 18:06		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0108	0.00400	0.000246	mg/L	09.18.18 15:59		1
Chromium	7440-47-3	0.129	0.00400	0.000525	mg/L	09.18.18 15:59		1
Iron	7439-89-6	0.0672	0.100	0.0227	mg/L	09.18.18 15:59	J	1
Manganese	7439-96-5	0.00235	0.00200	0.000199	mg/L	09.18.18 15:59		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.118	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP05-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-014

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1030	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	269	5.00	0.858	mg/L	09.14.18 18:13		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00707	0.00400	0.000246	mg/L	09.18.18 16:02		1
Chromium	7440-47-3	0.000783	0.00400	0.000525	mg/L	09.18.18 16:02	J	1
Iron	7439-89-6	0.184	0.100	0.0227	mg/L	09.18.18 16:02		1
Manganese	7439-96-5	0.0420	0.00200	0.000199	mg/L	09.18.18 16:02		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW052SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-015

Date Collected: 09.12.18 13.09

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3020	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1400	25.0	4.29	mg/L	09.14.18 18:43		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0131	0.00400	0.000246	mg/L	09.18.18 16:18		1
Chromium	7440-47-3	0.242	0.00400	0.000525	mg/L	09.18.18 16:18		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:18	U	1
Manganese	7439-96-5	0.000660	0.00200	0.000199	mg/L	09.18.18 16:18	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.222	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW049SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-016

Date Collected: 09.12.18 13.20

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2960	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1300	25.0	4.29	mg/L	09.14.18 18:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	09.18.18 16:21		1
Chromium	7440-47-3	0.188	0.00400	0.000525	mg/L	09.18.18 16:21		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:21	U	1
Manganese	7439-96-5	0.000414	0.00200	0.000199	mg/L	09.18.18 16:21	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.171	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW048SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-017

Date Collected: 09.12.18 13.32

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1960	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	583	10.0	1.72	mg/L	09.14.18 18:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0119	0.00400	0.000246	mg/L	09.18.18 16:24		1
Chromium	7440-47-3	0.453	0.00400	0.000525	mg/L	09.18.18 16:24		1
Iron	7439-89-6	0.136	0.100	0.0227	mg/L	09.18.18 16:24		1
Manganese	7439-96-5	0.000896	0.00200	0.000199	mg/L	09.18.18 16:24	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.404	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW041A-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-018

Date Collected: 09.12.18 13.44

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	403	5.00	0.858	mg/L	09.15.18 00:47		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	09.18.18 16:28		1
Chromium	7440-47-3	0.206	0.00400	0.000525	mg/L	09.18.18 16:28		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:28	U	1
Manganese	7439-96-5	0.00121	0.00200	0.000199	mg/L	09.18.18 16:28	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.167	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW062A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-019

Date Collected: 09.12.18 14.03

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	497	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	57.9	2.50	0.429	mg/L	09.15.18 00:55		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0240	0.00400	0.000246	mg/L	09.18.18 16:31		1
Chromium	7440-47-3	0.00213	0.00400	0.000525	mg/L	09.18.18 16:31	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:31	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 16:31	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW063A-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-020

Date Collected: 09.12.18 14.14

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	472	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.7	2.50	0.429	mg/L	09.15.18 01:02		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0233	0.00400	0.000246	mg/L	09.18.18 16:34		1
Chromium	7440-47-3	0.00162	0.00400	0.000525	mg/L	09.18.18 16:34	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:34	U	1
Manganese	7439-96-5	0.000592	0.00200	0.000199	mg/L	09.18.18 16:34	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW024A-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-021

Date Collected: 09.12.18 14.43

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2420	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	901	10.0	1.72	mg/L	09.15.18 01:10		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0125	0.00400	0.000246	mg/L	09.18.18 16:37		1
Chromium	7440-47-3	0.579	0.00400	0.000525	mg/L	09.18.18 16:37		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:37	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 16:37	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.477	0.0500	0.0136	mg/L	09.13.18 11:15		5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW070A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-022

Date Collected: 09.12.18 15.02

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1120	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	387	5.00	0.858	mg/L	09.15.18 01:39		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0145	0.00400	0.000246	mg/L	09.18.18 20:02		1
Chromium	7440-47-3	0.000838	0.00400	0.000525	mg/L	09.18.18 20:02	J	1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 20:02	U	1
Manganese	7439-96-5	0.000481	0.00200	0.000199	mg/L	09.18.18 20:02	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 11:15	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **Dup02-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-023

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2310	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	894	10.0	1.72	mg/L	09.15.18 01:47		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0126	0.00400	0.000246	mg/L	09.19.18 15:34		1
Chromium	7440-47-3	0.547	0.00400	0.000525	mg/L	09.19.18 15:34		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.19.18 15:34	U	1
Manganese	7439-96-5	0.000247	0.00200	0.000199	mg/L	09.19.18 15:34	J	1

Sample Id: **Dup02-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-023

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.520	0.0500	0.0136	mg/L	09.13.18 11:15	K	5



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW057SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-024

Date Collected: 09.12.18 11.35

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1450	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	346	5.00	0.858	mg/L	09.15.18 01:54		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0127	0.00400	0.000246	mg/L	09.19.18 15:37		1
Chromium	7440-47-3	0.0387	0.00400	0.000525	mg/L	09.19.18 15:37		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.19.18 15:37	U	1
Manganese	7439-96-5	0.000203	0.00200	0.000199	mg/L	09.19.18 15:37	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0276	0.0100	0.00273	mg/L	09.13.18 11:15		1



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Lab Work Order # 59078

Page 1 of 2

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City State Zip Roseville CA 95678		Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Project #: B0048789.0004 Sample's Printed Name: Steven S. Krehbiel																																																																																																																																																																																																																						
Send Results to:																																																																																																																																																																																																																										
PARAMETER ANALYSIS & METHOD																																																																																																																																																																																																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample ID</th> <th rowspan="2">Collection Date</th> <th rowspan="2">Time</th> <th rowspan="2">Type (✓)</th> <th rowspan="2">Comp</th> <th rowspan="2">Grab</th> <th rowspan="2">Matrix</th> <th colspan="5">PARAMETER ANALYSIS & METHOD</th> <th rowspan="2">REMARKS</th> </tr> <tr> <th>BTEX 8021B</th> <th>TPH GRO & DRO 8015B</th> <th>Dissolved As, Mn, Fe, Cr 6010B</th> <th>Dissolved Hex Chromium 7196</th> <th>Chloride & TDS</th> </tr> </thead> <tbody> <tr><td>M20088M-W-180913</td><td>9/13/18</td><td>1447</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20013-W-180913</td><td>9/13/18</td><td>1438</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20042A-W-180913</td><td>9/13/18</td><td>1429</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20040-W-180913</td><td>9/13/18</td><td>1421</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20019A-W-180913</td><td>9/13/18</td><td>1409</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20018-W-180913</td><td>9/13/18</td><td>1340</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20020A-W-180913</td><td>9/13/18</td><td>1400</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20099-W-180913</td><td>9/13/18</td><td>1321</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M2005A-W-180913</td><td>9/13/18</td><td>1229</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20026-W-180913</td><td>9/13/18</td><td>1239</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20027-W-180913</td><td>9/13/18</td><td>1229</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20037-W-180913</td><td>9/13/18</td><td>1219</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20069-W-180913</td><td>9/13/18</td><td>1144</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>M20061-W-180913</td><td>9/13/18</td><td>1132</td><td>X</td><td></td><td></td><td>W</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>					Sample ID	Collection Date	Time	Type (✓)	Comp	Grab	Matrix	PARAMETER ANALYSIS & METHOD					REMARKS	BTEX 8021B	TPH GRO & DRO 8015B	Dissolved As, Mn, Fe, Cr 6010B	Dissolved Hex Chromium 7196	Chloride & TDS	M20088M-W-180913	9/13/18	1447	X			W								M20013-W-180913	9/13/18	1438	X			W								M20042A-W-180913	9/13/18	1429	X			W								M20040-W-180913	9/13/18	1421	X			W								M20019A-W-180913	9/13/18	1409	X			W								M20018-W-180913	9/13/18	1340	X			W								M20020A-W-180913	9/13/18	1400	X			W								M20099-W-180913	9/13/18	1321	X			W								M2005A-W-180913	9/13/18	1229	X			W								M20026-W-180913	9/13/18	1239	X			W								M20027-W-180913	9/13/18	1229	X			W								M20037-W-180913	9/13/18	1219	X			W								M20069-W-180913	9/13/18	1144	X			W								M20061-W-180913	9/13/18	1132	X			W							
Sample ID	Collection Date	Time	Type (✓)	Comp								Grab	Matrix	PARAMETER ANALYSIS & METHOD					REMARKS																																																																																																																																																																																																							
					BTEX 8021B	TPH GRO & DRO 8015B	Dissolved As, Mn, Fe, Cr 6010B	Dissolved Hex Chromium 7196	Chloride & TDS																																																																																																																																																																																																																	
M20088M-W-180913	9/13/18	1447	X			W																																																																																																																																																																																																																				
M20013-W-180913	9/13/18	1438	X			W																																																																																																																																																																																																																				
M20042A-W-180913	9/13/18	1429	X			W																																																																																																																																																																																																																				
M20040-W-180913	9/13/18	1421	X			W																																																																																																																																																																																																																				
M20019A-W-180913	9/13/18	1409	X			W																																																																																																																																																																																																																				
M20018-W-180913	9/13/18	1340	X			W																																																																																																																																																																																																																				
M20020A-W-180913	9/13/18	1400	X			W																																																																																																																																																																																																																				
M20099-W-180913	9/13/18	1321	X			W																																																																																																																																																																																																																				
M2005A-W-180913	9/13/18	1229	X			W																																																																																																																																																																																																																				
M20026-W-180913	9/13/18	1239	X			W																																																																																																																																																																																																																				
M20027-W-180913	9/13/18	1229	X			W																																																																																																																																																																																																																				
M20037-W-180913	9/13/18	1219	X			W																																																																																																																																																																																																																				
M20069-W-180913	9/13/18	1144	X			W																																																																																																																																																																																																																				
M20061-W-180913	9/13/18	1132	X			W																																																																																																																																																																																																																				
Special Instructions/Comments: ☐ Special QA/QC Instructions (✓):																																																																																																																																																																																																																										

Lab Name: Xenco		Relinquished By: Printed Name: <i>Steven S. Krehbiel</i> Signature: <i>[Signature]</i> Firm/Courier: Xenco Date/Time: 09/13/18 16:57		Laboratory Received By: Printed Name: <i>Brianna Teel</i> Signature: <i>[Signature]</i> Firm: Xenco Date/Time: 9/13/18 1900	
Lab Work Order # 59078		Page 1 of 2		Yellow - Lab copy	



ARCADIS

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Page 2 of 2
Lab Work Order # 201

Lab Work Order # 599078

Contact & Company Name: Brett Krehbiel Arcadis		Telephone: 916-786-0320		Preservatives ☐ Filtered (✓) ☐ # of Containers ☐ Container Information		B C E E	
Address: 101 Creekside Ridge Court, Suite 200		Fax: 916-786-0366					
City Roseville		State CA		Zip 95678			
Project Name/Location (City, State): Chevron N. Eunice		E-mail Address: brett.krehbiel@arcadis.com					
Project #: B0048789.0004		Sample ID		Collection		Type (✓) Date Time Comp Grab Matrix	
Sample ID MW0095-W-180913		Collection 8/13/18 11:17		Type (✓) Comp		Grab Matrix ☒	
MW0030-W-180913		8/13/18 09:58		☒		☒	
MW0031-W-180913		8/13/18 10:30		☒		☒	
MW0060-W-180913		8/13/18 11:03		☒		☒	
MW0059-W-180913		8/13/18 10:10		☒		☒	
MW0059-W-180913		8/13/18 10:41		☒		☒	
MW0023-W-180913		8/13/18 10:20		☒		☒	
Special Instructions/Comments: Special QA/QC Instructions (✓):							

Container Information Key:

1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:

SE - Sediment
 SO - Soil
 W - Water
 T - Tissue

Container Information Key:

SE - Sediment
 SO - Soil
 W - Water
 T - Tissue

Matrix Key:

SE - Sediment
 SO - Soil
 W - Water
 T - Tissue

PARAMETER ANALYSIS & METHOD

TPH GRO & DRO	Disolved As, Mn, 8015B	Disolved Hex Chromium 7196	Chloride & TDS
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57

Received By

Printed Name: Winston N. Taylor

Signature: *Winston N. Taylor*

Firm/Counter: Xenco

Date/Time: 8/13/18 16:57

Relinquished By

Printed Name: Terry S. Shawzwee

Signature: *Terry S. Shawzwee*

Firm/Counter: Arcadis

Date/Time: 8/13/18 10:57



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW088M-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-001

Date Collected: 09.13.18 14.47

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3200	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1760	25.0	4.29	mg/L	09.18.18 18:46		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0234	0.00400	0.000246	mg/L	09.18.18 16:12		1
Chromium	7440-47-3	0.157	0.00400	0.000525	mg/L	09.18.18 16:12		1
Iron	7439-89-6	1.99	0.100	0.0227	mg/L	09.18.18 16:12		1
Manganese	7439-96-5	0.994	0.0200	0.00199	mg/L	11.08.18 14:15	D	10

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW013-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-002

Date Collected: 09.13.18 14.38

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2810	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	692	10.0	1.72	mg/L	09.18.18 18:56		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00757	0.00400	0.000246	mg/L	09.18.18 16:15		1
Chromium	7440-47-3	1.76	0.00400	0.000525	mg/L	09.18.18 16:15		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 16:15	U	1
Manganese	7439-96-5	0.000747	0.00200	0.000199	mg/L	09.18.18 16:15	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.84	0.0500	0.0136	mg/L	09.14.18 07:20		5



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW040A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-003

Date Collected: 09.13.18 14.29

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	497	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.6	2.50	0.429	mg/L	09.18.18 19:07		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.0200	0.00123	mg/L	09.19.18 17:20	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:20	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:20	U	5
Manganese	7439-96-5	0.00163	0.0100	0.000993	mg/L	09.19.18 17:20	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW010-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-004

Date Collected: 09.13.18 14.21

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4990	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2550	25.0	4.29	mg/L	09.18.18 19:17		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00939	0.0200	0.00123	mg/L	09.19.18 17:23	J	5
Chromium	7440-47-3	0.0228	0.0200	0.00262	mg/L	09.19.18 17:23		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:23	U	5
Manganese	7439-96-5	0.00206	0.0100	0.000993	mg/L	09.19.18 17:23	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0120	0.0100	0.00273	mg/L	09.14.18 07:20		1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW019A-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-005

Date Collected: 09.13.18 14.09

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1170	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	291	5.00	0.858	mg/L	09.18.18 19:48		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.0200	0.00123	mg/L	09.19.18 17:26	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:26	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:26	U	5
Manganese	7439-96-5	0.0118	0.0100	0.000993	mg/L	09.19.18 17:26		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW018-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-006

Date Collected: 09.13.18 13.46

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2210	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	528	10.0	1.72	mg/L	09.18.18 19:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00937	0.0200	0.00123	mg/L	09.19.18 17:29	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:29	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:29	U	5
Manganese	7439-96-5	0.00220	0.0100	0.000993	mg/L	09.19.18 17:29	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW020A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-007

Date Collected: 09.13.18 14.00

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2370	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	961	10.0	1.72	mg/L	09.18.18 20:09		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0112	0.0200	0.00123	mg/L	09.19.18 17:32	J	5
Chromium	7440-47-3	0.00675	0.0200	0.00262	mg/L	09.19.18 17:32	J	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:32	U	5
Manganese	7439-96-5	0.00217	0.0100	0.000993	mg/L	09.19.18 17:32	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW099-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-008

Date Collected: 09.13.18 13.21

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	496	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	64.6	2.50	0.429	mg/L	09.18.18 20:19		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00898	0.0200	0.00123	mg/L	09.19.18 17:36	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:36	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:36	U	5
Manganese	7439-96-5	0.219	0.0100	0.000993	mg/L	09.19.18 17:36		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW015A-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-009

Date Collected: 09.13.18 12.49

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	9850	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	5950	25.0	4.29	mg/L	09.18.18 20:29		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00882	0.0200	0.00123	mg/L	09.19.18 17:39	J	5
Chromium	7440-47-3	0.00534	0.0200	0.00262	mg/L	09.19.18 17:39	J	5
Iron	7439-89-6	0.164	0.500	0.114	mg/L	09.19.18 17:39	J	5
Manganese	7439-96-5	0.0197	0.0100	0.000993	mg/L	09.19.18 17:39		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW026-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-010

Date Collected: 09.13.18 12.39

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	860	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	129	2.50	0.429	mg/L	09.18.18 21:11		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00774	0.0200	0.00123	mg/L	09.19.18 17:42	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:42	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:42	U	5
Manganese	7439-96-5	0.00160	0.0100	0.000993	mg/L	09.19.18 17:42	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW027-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-011

Date Collected: 09.13.18 12.28

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	355	5.00	0.858	mg/L	09.18.18 21:21		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00682	0.0200	0.00123	mg/L	09.19.18 17:45	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:45	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:45	U	5
Manganese	7439-96-5	0.00133	0.0100	0.000993	mg/L	09.19.18 17:45	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW032-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-012

Date Collected: 09.13.18 12.19

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1190	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	309	5.00	0.858	mg/L	09.18.18 21:52		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00389	0.0200	0.00123	mg/L	09.19.18 17:58	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:58	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 17:58	U	5
Manganese	7439-96-5	0.00249	0.0100	0.000993	mg/L	09.19.18 17:58	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW068-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-013

Date Collected: 09.13.18 11.44

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	18000	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	11700	50.0	8.58	mg/L	09.18.18 22:03		100

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0180	0.0200	0.00123	mg/L	09.19.18 18:01	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:01	U	5
Iron	7439-89-6	0.345	0.500	0.114	mg/L	09.19.18 18:01	J	5
Manganese	7439-96-5	2.37	0.0100	0.000993	mg/L	09.19.18 18:01		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW061-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-014

Date Collected: 09.13.18 11.32

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3830	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	25.0	4.29	mg/L	09.18.18 22:13		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.0200	0.00123	mg/L	09.19.18 18:04	J	5
Chromium	7440-47-3	1.56	0.0200	0.00262	mg/L	09.19.18 18:04		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:04	U	5
Manganese	7439-96-5	0.0360	0.0100	0.000993	mg/L	09.19.18 18:04		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.44	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW095-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-015

Date Collected: 09.13.18 11.17

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3650	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1380	25.0	4.29	mg/L	09.18.18 22:23		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00984	0.0200	0.00123	mg/L	09.19.18 18:08	J	5
Chromium	7440-47-3	3.93	0.0200	0.00262	mg/L	09.19.18 18:08		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:08	U	5
Manganese	7439-96-5	0.140	0.0100	0.000993	mg/L	09.19.18 18:08		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.62	0.200	0.0545	mg/L	09.14.18 08:15		20



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW030-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-016

Date Collected: 09.13.18 09.58

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	726	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	245	2.50	0.429	mg/L	09.18.18 22:34		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0189	0.0200	0.00123	mg/L	09.19.18 18:11	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:11	U	5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:11	U	5
Manganese	7439-96-5	0.00159	0.0100	0.000993	mg/L	09.19.18 18:11	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW031-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-017

Date Collected: 09.13.18 10.30

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	832	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	233	5.00	0.858	mg/L	09.18.18 22:44		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.102	0.0200	0.00123	mg/L	09.19.18 18:14		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:14	U	5
Iron	7439-89-6	4.17	0.500	0.114	mg/L	09.19.18 18:14		5
Manganese	7439-96-5	1.02	0.0100	0.000993	mg/L	09.19.18 18:14		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW060-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: ~~599078-018~~

Date Collected: 09.13.18 11.03

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3470	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1560	25.0	4.29	mg/L	09.18.18 22:54		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00342	0.0200	0.00123	mg/L	09.19.18 18:17	J	5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:17	U	5
Iron	7439-89-6	0.765	0.500	0.114	mg/L	09.19.18 18:17		5
Manganese	7439-96-5	10.5	0.100	0.00993	mg/L	11.08.18 14:12	D	50

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW059-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-019

Date Collected: 09.13.18 10.10

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3070	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	904	25.0	4.29	mg/L	09.19.18 00:27		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.0200	0.00123	mg/L	09.19.18 18:20	J	5
Chromium	7440-47-3	0.556	0.0200	0.00262	mg/L	09.19.18 18:20		5
Iron	7439-89-6	<0.114	0.500	0.114	mg/L	09.19.18 18:20	U	5
Manganese	7439-96-5	0.00308	0.0100	0.000993	mg/L	09.19.18 18:20	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.469	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW069-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-020

Date Collected: 09.13.18 10.41

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1990	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	804	10.0	1.72	mg/L	09.19.18 00:38		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0149	0.00400	0.000246	mg/L	09.18.18 18:26		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 18:26	U	1
Iron	7439-89-6	0.563	0.100	0.0227	mg/L	09.18.18 18:26		1
Manganese	7439-96-5	0.774	0.00200	0.000199	mg/L	09.18.18 18:26		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 09:00	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW023-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-021

Date Collected: 09.13.18 10.20

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	785	25.0	4.29	mg/L	09.19.18 00:48		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00933	0.00400	0.000246	mg/L	09.18.18 18:54		1
Chromium	7440-47-3	1.72	0.00400	0.000525	mg/L	09.18.18 18:54		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 18:54	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 18:54	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.43	0.0500	0.0136	mg/L	09.14.18 08:15		5



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order # **599188**

Page **1** of **4**

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City: Roseville State: CA Zip: 95678 Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Preservative Filtered (✓) # of Containers Container Information		B 1		C 3		E 4		E 4	
PARAMETER ANALYSIS & METHOD											
BTEX 8021B TPH GRO & DRO Dissolved As, Mn, Fe, Cr 6010B Dissolved Hex Chromium 7196 Chloride & TDS											
Sample ID MW002A-W-180914 MW001A-W-180914 MW002A-W-180914 DUP-1-W-180914 MW006A-W-180914 MW007-W-180914 MW008-W-180914 MW009SA-W-180914 MW004A-W-180914 DUP-1-W-180914 TW023-W-180914 MW003SA-W-180914		Collection Date: 9/14/18 Time: 0944 Type (✓) Comp: X Grab: X		Matrix W W W W W W W W W W W		REMARKS Temp. 5.3 R80.0					
Special Instructions/Comments: ☐ Special QA/QC instructions (✓):											
Laboratory Information and Receipt Lab Name: Xenco Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact Sample Receipt: Condition/Cooler Temp:				Relinquished By Printed Name: Shawnne Comer Signature: [Signature] Firm: Arcadis Date/Time: 9/14/18 15:14				Received By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]			
Laboratory Received By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]				Relinquished By: [Blank]							

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK - Retained by Arcadis



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW007A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-001

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3040	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.19.18 01:29		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0115	0.00400	0.000246	mg/L	09.18.18 18:58		1
Chromium	7440-47-3	0.763	0.00400	0.000525	mg/L	09.18.18 18:58		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 18:58	U	1
Manganese	7439-96-5	0.000655	0.00200	0.000199	mg/L	09.18.18 18:58	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.670	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW011A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0142	0.00400	0.000246	mg/L	09.18.18 19:01		1
Chromium	7440-47-3	0.291	0.00400	0.000525	mg/L	09.18.18 19:01		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:01	U	1
Manganese	7439-96-5	0.193	0.00200	0.000199	mg/L	09.18.18 19:01		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.242	0.0100	0.00273	mg/L	09.14.18 16:00		1

Sample Id: **MW011A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	646	10.0	1.72	mg/L	09.19.18 01:40		20



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW002A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-003

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3330	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1610	25.0	4.29	mg/L	09.19.18 01:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.00400	0.000246	mg/L	09.18.18 19:04		1
Chromium	7440-47-3	0.963	0.00400	0.000525	mg/L	09.18.18 19:04		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:04	U	1
Manganese	7439-96-5	0.0193	0.00200	0.000199	mg/L	09.18.18 19:04		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.796	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP01-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-004

Date Collected: 09.14.18 10.18

Date Received: 09.14.18 15.14

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0136	0.00400	0.000246	mg/L	09.18.18 19:07		1
Chromium	7440-47-3	0.277	0.00400	0.000525	mg/L	09.18.18 19:07		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:07	U	1
Manganese	7439-96-5	0.187	0.00200	0.000199	mg/L	09.18.18 19:07		1

Sample Id: **DUP01-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-004

Date Collected: 09.14.18 10.18

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2080	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	576	10.0	1.72	mg/L	09.19.18 02:00		20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.239	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW016A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-005

Date Collected: 09.14.18 10.34

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1290	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	513	5.00	0.858	mg/L	09.19.18 02:11		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00914	0.00400	0.000246	mg/L	09.18.18 19:10		1
Chromium	7440-47-3	0.00528	0.00400	0.000525	mg/L	09.18.18 19:10		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:10	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 19:10	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW047-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-006

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1950	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	276	10.0	1.72	mg/L	09.19.18 02:52		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.00400	0.000246	mg/L	09.19.18 17:55		1
Chromium	7440-47-3	0.0600	0.00400	0.000525	mg/L	09.19.18 17:55		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:14	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 19:14	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0507	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW008M-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-007

Date Collected: 09.14.18 11.13

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4600	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1350	25.0	4.29	mg/L	09.19.18 03:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00312	0.00400	0.000246	mg/L	09.18.18 19:17	J	1
Chromium	7440-47-3	0.00775	0.00400	0.000525	mg/L	09.18.18 19:17		1
Iron	7439-89-6	40.4	0.100	0.0227	mg/L	09.18.18 19:17		1
Manganese	7439-96-5	3.08	0.0400	0.00397	mg/L	11.08.18 14:09	D	20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW089SA-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-008

Date Collected: 09.14.18 09.32

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3780	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1040	25.0	4.29	mg/L	09.19.18 08:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	09.18.18 19:26		1
Chromium	7440-47-3	1.18	0.00400	0.000525	mg/L	09.18.18 19:26		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:26	U	1
Manganese	7439-96-5	0.000448	0.00200	0.000199	mg/L	09.18.18 19:26	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.04	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW004A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-009

Date Collected: 09.14.18 09.57

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2230	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	632	10.0	1.72	mg/L	09.19.18 08:32		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0158	0.00400	0.000246	mg/L	09.18.18 19:30		1
Chromium	7440-47-3	0.515	0.00400	0.000525	mg/L	09.18.18 19:30		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:30	U	1
Manganese	7439-96-5	0.000320	0.00200	0.000199	mg/L	09.18.18 19:30	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.497	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP06-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-010

Date Collected: 09.14.18 09.26

Date Received: 09.14.18 15.14

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: T104704215-18-28

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.18.18 19:33		1
Chromium	7440-47-3	0.383	0.00400	0.000525	mg/L	09.18.18 19:33		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:33	U	1
Manganese	7439-96-5	<0.000199	0.00200	0.000199	mg/L	09.18.18 19:33	U	1

Sample Id: **DUP06-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-010

Date Collected: 09.14.18 09.26

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2880	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	638	10.0	1.72	mg/L	09.19.18 08:42		20

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.269	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: IW023-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-011

Date Collected: 09.14.18 09.17

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2790	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	645	10.0	1.72	mg/L	09.19.18 08:53		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0102	0.00400	0.000246	mg/L	09.18.18 19:36		1
Chromium	7440-47-3	0.376	0.00400	0.000525	mg/L	09.18.18 19:36		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:36	U	1
Manganese	7439-96-5	0.000254	0.00200	0.000199	mg/L	09.18.18 19:36	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.307	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW093SA-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-012

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3440	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	914	25.0	4.29	mg/L	09.19.18 09:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00859	0.00400	0.000246	mg/L	09.18.18 19:39		1
Chromium	7440-47-3	0.494	0.00400	0.000525	mg/L	09.18.18 19:39		1
Iron	7439-89-6	<0.0227	0.100	0.0227	mg/L	09.18.18 19:39	U	1
Manganese	7439-96-5	0.0190	0.00200	0.000199	mg/L	09.18.18 19:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.504	0.0500	0.0136	mg/L	09.14.18 16:00		5

Analytical Report 598697

for

ARCADIS

Project Manager: Brett Krehbiel

Chevron N. Eunice

B0048789.0004

19-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

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

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

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



Table of Contents

Cover Page	1
Cover Letter	3
Sample ID Cross Reference	4
LCASE_NARR_SUMMARY	5
Certificate of Analysis (Detailed Report)	6
Chronology of Holding Times	30
Explanation of Qualifiers (Flags)	36
Analytical Log	37
SURR_QC_V62	44
LCS / LCSD Recoveries	46
MS / MSD Recoveries	49
Method Duplicate	52
Laboratory Review Checklist	53
DCS_SUMMARY	57
Chain of Custody	58
IOS_COC_113764	59
IOS_Check_List_113764	60
Sample Receipt Conformance Report	61



19-SEP-18

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **598697**

Chevron N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 598697. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 598697 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Kelsey Brooks'.

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 598697****ARCADIS, Midland, TX**

Chevron N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW001-W-180911	W	09-11-18 11:50		598697-001
MW046A-W-180911	W	09-11-18 12:20		598697-002
MW045-W-180911	W	09-11-18 12:26		598697-003
MW037-W-180911	W	09-11-18 12:49		598697-004
MW043-W-180911	W	09-11-18 13:46		598697-005
IW019-W-180911	W	09-11-18 13:17		598697-006
MW100-W-180911	W	09-11-18 13:42		598697-007
MW076SA-W-180911	W	09-11-18 14:02		598697-008
MW075SA-W-180911	W	09-11-18 14:12		598697-009
MW084SA-W-180911	W	09-11-18 14:23		598697-010
MW085SA-W-180911	W	09-11-18 14:32		598697-011
MW086SA-W-180911	W	09-11-18 14:47		598697-012
DUP03-W-180911	W	09-11-18 00:00		598697-013
DUP07-W-180911	W	09-11-18 00:00		598697-014



CASE NARRATIVE SUMMARY



Client Name: *ARCADIS*

Project Name: *Chevron N. Eunice*

Project ID: *B0048789.0004*

Work Order Number: *598697*

Report Date: *19-SEP-18*

Date Received: *11-SEP-18*

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', is written over a horizontal line.

Kelsey Brooks
Project Manager



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW001-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-001

Date Collected: 09.11.18 11.50

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2610	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	275	10.0	1.72	mg/L	09.12.18 22:18		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00241	0.00400	0.000246	mg/L	09.16.18 23:18	J	1
Barium	7440-39-3	0.0518	0.00400	0.000484	mg/L	09.16.18 23:18		1
Chromium	7440-47-3	0.00146	0.00400	0.000525	mg/L	09.16.18 23:18	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW001-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-001

Date Collected: 09.11.18 11.50

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.14.18 23:25	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.14.18 23:25	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	99	70 - 135	%		
o-Terphenyl	99	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 16:39	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 16:39	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 16:39	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 16:39	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 16:39	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 16:39	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 16:39	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	95	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW046A-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-002

Date Collected: 09.11.18 12.20

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2980	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	704	10.0	1.72	mg/L	09.12.18 22:45		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	09.16.18 23:41		1
Barium	7440-39-3	0.0147	0.00400	0.000484	mg/L	09.16.18 23:41		1
Chromium	7440-47-3	1.77	0.00400	0.000525	mg/L	09.16.18 23:41		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.67	0.100	0.0273	mg/L	09.12.18 09:45		10



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW046A-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-002

Date Collected: 09.11.18 12.20

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	09.15.18 00:24	U	1
Diesel Range Organics	C10C28DRO	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1
Oil Range Hydrocarbons	PHCG2835	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1
Total TPH	PHC635	<0.912	1.50	0.912	mg/L	09.15.18 00:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	91	70 - 135	%		
o-Terphenyl	92	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 17:00	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:00	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 17:00	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 17:00	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 17:00	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 17:00	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 17:00	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	70 - 130	%		
4-Bromofluorobenzene	87	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW045-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-003

Date Collected: 09.11.18 12.26

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1350	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	72.1	5.00	0.858	mg/L	09.12.18 22:54		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00213	0.00400	0.000246	mg/L	09.16.18 23:44	J	1
Barium	7440-39-3	0.115	0.00400	0.000484	mg/L	09.16.18 23:44		1
Chromium	7440-47-3	0.0131	0.00400	0.000525	mg/L	09.16.18 23:44		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW045-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-003

Date Collected: 09.11.18 12.26

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 00:44	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 00:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 17:20	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:20	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 17:20	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 17:20	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 17:20	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 17:20	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 17:20	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW037-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-004

Date Collected: 09.11.18 12.49

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1470	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	549	10.0	1.72	mg/L	09.12.18 23:04		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0502	0.00400	0.000246	mg/L	09.16.18 23:47		1
Barium	7440-39-3	1.11	0.00400	0.000484	mg/L	09.16.18 23:47		1
Chromium	7440-47-3	0.00126	0.00400	0.000525	mg/L	09.16.18 23:47	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW037-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-004

Date Collected: 09.11.18 12.49

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.987	1.50	0.987	mg/L	09.15.18 01:04	U	1
Diesel Range Organics	C10C28DRO	1.04	1.50	0.911	mg/L	09.15.18 01:04	J	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:04	U	1
Total TPH	PHC635	1.04	1.50	0.911	mg/L	09.15.18 01:04	J	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	94	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.0719	0.00200	0.000408	mg/L	09.12.18 17:40		1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 17:40	U	1
Ethylbenzene	100-41-4	0.0108	0.00200	0.000657	mg/L	09.12.18 17:40		1
m,p-Xylenes	179601-23-1	0.00593	0.00400	0.000630	mg/L	09.12.18 17:40		1
o-Xylene	95-47-6	0.00384	0.00200	0.000642	mg/L	09.12.18 17:40		1
Total Xylenes	1330-20-7	0.00977	0.00200	0.000630	mg/L	09.12.18 17:40		1
Total BTEX		0.0925	0.00200	0.000367	mg/L	09.12.18 17:40		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	94	70 - 130	%		
4-Bromofluorobenzene	119	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW043-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-005

Date Collected: 09.11.18 13.46

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1620	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	610	10.0	1.72	mg/L	09.12.18 23:13		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00508	0.00400	0.000246	mg/L	09.16.18 23:50		1
Barium	7440-39-3	0.328	0.00400	0.000484	mg/L	09.16.18 23:50		1
Chromium	7440-47-3	0.000688	0.00400	0.000525	mg/L	09.16.18 23:50	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW043-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-005

Date Collected: 09.11.18 13.46

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 01:24	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 01:24	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	92	70 - 135	%		
o-Terphenyl	93	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 19:28	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 19:28	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 19:28	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 19:28	U	1
o-Xylene	95-47-6	0.00347	0.00200	0.000642	mg/L	09.12.18 19:28		1
Total Xylenes	1330-20-7	0.00347	0.00200	0.000630	mg/L	09.12.18 19:28		1
Total BTEX		0.00347	0.00200	0.000367	mg/L	09.12.18 19:28		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	63	70 - 130	%		**
4-Bromofluorobenzene	94	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW019-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-006

Date Collected: 09.11.18 13.17

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	25.0	4.29	mg/L	09.12.18 23:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.16.18 23:53		1
Barium	7440-39-3	0.0512	0.00400	0.000484	mg/L	09.16.18 23:53		1
Chromium	7440-47-3	0.757	0.00400	0.000525	mg/L	09.16.18 23:53		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.687	0.0500	0.0136	mg/L	09.12.18 09:45		5



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW019-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-006

Date Collected: 09.11.18 13.17

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 01:44	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 01:44	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	91	70 - 135	%		
o-Terphenyl	94	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 18:01	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 18:01	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 18:01	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 18:01	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 18:01	U	1
Total Xylenes	1330-20-7	<0.000630	0.00200	0.000630	mg/L	09.12.18 18:01	U	1
Total BTEX		<0.000367	0.00200	0.000367	mg/L	09.12.18 18:01	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	98	70 - 130	%		
4-Bromofluorobenzene	94	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW100-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-007

Date Collected: 09.11.18 13.42

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1640	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	789	10.0	1.72	mg/L	09.12.18 23:59		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00935	0.00400	0.000246	mg/L	09.16.18 23:56		1
Barium	7440-39-3	0.0441	0.00400	0.000484	mg/L	09.16.18 23:56		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.16.18 23:56	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW076SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-008

Date Collected: 09.11.18 14.02

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1850	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	583	10.0	1.72	mg/L	09.13.18 00:08		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0130	0.00400	0.000246	mg/L	09.17.18 00:00		1
Barium	7440-39-3	0.0261	0.00400	0.000484	mg/L	09.17.18 00:00		1
Chromium	7440-47-3	0.0137	0.00400	0.000525	mg/L	09.17.18 00:00		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00580	0.0100	0.00273	mg/L	09.12.18 09:45	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW075SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-009

Date Collected: 09.11.18 14.12

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1670	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	399	5.00	0.858	mg/L	09.13.18 21:05		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0152	0.00400	0.000246	mg/L	09.17.18 00:03		1
Barium	7440-39-3	0.0192	0.00400	0.000484	mg/L	09.17.18 00:03		1
Chromium	7440-47-3	0.0135	0.00400	0.000525	mg/L	09.17.18 00:03		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00660	0.0100	0.00273	mg/L	09.12.18 09:45	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW084SA-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-010

Date Collected: 09.11.18 14.23

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3060	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1370	25.0	4.29	mg/L	09.13.18 21:16		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00938	0.00400	0.000246	mg/L	09.17.18 00:06		1
Barium	7440-39-3	0.0424	0.00400	0.000484	mg/L	09.17.18 00:06		1
Chromium	7440-47-3	0.0168	0.00400	0.000525	mg/L	09.17.18 00:06		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00860	0.0100	0.00273	mg/L	09.12.18 11:30	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW085SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-011

Date Collected: 09.11.18 14.32

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1650	25.0	4.29	mg/L	09.13.18 21:27		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0140	0.00400	0.000246	mg/L	09.17.18 00:09		1
Barium	7440-39-3	0.0558	0.00400	0.000484	mg/L	09.17.18 00:09		1
Chromium	7440-47-3	0.0258	0.00400	0.000525	mg/L	09.17.18 00:09		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.00280	0.0100	0.00273	mg/L	09.12.18 11:30	J	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW086SA-W-180911

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-012

Date Collected: 09.11.18 14.47

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3110	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1260	25.0	4.29	mg/L	09.13.18 21:39		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0123	0.00400	0.000246	mg/L	09.17.18 00:19		1
Barium	7440-39-3	0.0317	0.00400	0.000484	mg/L	09.17.18 00:19		1
Chromium	7440-47-3	0.0340	0.00400	0.000525	mg/L	09.17.18 00:19		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0255	0.0100	0.00273	mg/L	09.12.18 11:30		1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP03-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-013

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1670	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	641	10.0	1.72	mg/L	09.13.18 21:50		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00524	0.00400	0.000246	mg/L	09.17.18 00:22		1
Barium	7440-39-3	0.323	0.00400	0.000484	mg/L	09.17.18 00:22		1
Chromium	7440-47-3	0.000605	0.00400	0.000525	mg/L	09.17.18 00:22	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP03-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-013

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.15.18 02:03	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.15.18 02:03	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	96	70 - 135	%		
o-Terphenyl	97	70 - 135	%		

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 19:07	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 19:07	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 19:07	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 19:07	U	1
o-Xylene	95-47-6	0.00319	0.00200	0.000642	mg/L	09.12.18 19:07		1
Total Xylenes	1330-20-7	0.00319	0.00200	0.000630	mg/L	09.12.18 19:07		1
Total BTEX		0.00319	0.00200	0.000367	mg/L	09.12.18 19:07		1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	85	70 - 130	%		
4-Bromofluorobenzene	117	70 - 130	%		



Certificate of Analytical Results

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP07-W-180911**

Matrix: Water

Sample Depth:

Lab Sample Id: 598697-014

Date Collected: 09.11.18 00.00

Date Received: 09.11.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1730	5.00	5.00	mg/L	09.12.18 17:10		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	865	10.0	1.72	mg/L	09.13.18 22:01		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00906	0.00400	0.000246	mg/L	09.17.18 00:25		1
Barium	7440-39-3	0.0422	0.00400	0.000484	mg/L	09.17.18 00:25		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.17.18 00:25	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **3062935-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3062935-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062935

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 09:45	U	1

Sample Id: **3062947-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3062947-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3062947

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.12.18 11:30	U	1

Sample Id: **3063197-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063197-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.12.18 17:10	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: 7662127-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662127-1-BLK

Date Collected:

Date Received:

Analytical Method: BTEX by EPA 8021B

Prep Method: 5030B

Analyst: ALJ

% Moist:

Tech: ALJ

Seq Number: 3062942

Date Prep: 09.12.18 08.00

Prep seq: 7662127

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	09.12.18 10:10	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	09.12.18 10:10	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	09.12.18 10:10	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	09.12.18 10:10	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	09.12.18 10:10	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	93	70 - 130	%		
4-Bromofluorobenzene	97	70 - 130	%		

Sample Id: 7662143-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662143-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063340

Date Prep: 09.12.18 16.15

Prep seq: 7662143

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.12.18 20:55	U	1

Sample Id: 7662348-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662348-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.16.18 23:09	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.16.18 23:09	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.16.18 23:09	U	1



Certificate of Analytical Results

598697

ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **7662365-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662365-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH By SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3063336

Date Prep: 09.14.18 15.00

Prep seq: 7662365

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons	PHC610	<0.986	1.50	0.986	mg/L	09.14.18 22:26	U	1
Diesel Range Organics	C10C28DRO	<0.911	1.50	0.911	mg/L	09.14.18 22:26	U	1
Oil Range Hydrocarbons	PHCG2835	<0.911	1.50	0.911	mg/L	09.14.18 22:26	U	1
Total TPH	PHC635	<0.911	1.50	0.911	mg/L	09.14.18 22:26	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	100	70 - 135	%		
o-Terphenyl	101	70 - 135	%		



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chloride by EPA 300

Client : ARCADIS

Work Order #: 598697

Project ID: B0048789.0004

Date Received: 09/11/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW001-W-180911	598697-001	09/11/18				09/12/18	28	1	P
MW046A-W-180911	598697-002	09/11/18				09/12/18	28	1	P
MW045-W-180911	598697-003	09/11/18				09/12/18	28	1	P
MW037-W-180911	598697-004	09/11/18				09/12/18	28	1	P
MW043-W-180911	598697-005	09/11/18				09/12/18	28	1	P
IW019-W-180911	598697-006	09/11/18				09/12/18	28	1	P
MW100-W-180911	598697-007	09/11/18				09/12/18	28	1	P
MW076SA-W-180911	598697-008	09/11/18				09/13/18	28	2	P
MW075SA-W-180911	598697-009	09/11/18				09/13/18	28	2	P
MW084SA-W-180911	598697-010	09/11/18				09/13/18	28	2	P
MW085SA-W-180911	598697-011	09/11/18				09/13/18	28	2	P
MW086SA-W-180911	598697-012	09/11/18				09/13/18	28	2	P
DUP03-W-180911	598697-013	09/11/18				09/13/18	28	2	P
DUP07-W-180911	598697-014	09/11/18				09/13/18	28	2	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : TDS by SM2540C

Client : ARCADIS

Work Order #: 598697

Project ID: B0048789.0004

Date Received: 09/11/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW001-W-180911	598697-001	09/11/18				09/12/18	7	1	P
MW046A-W-180911	598697-002	09/11/18				09/12/18	7	1	P
MW045-W-180911	598697-003	09/11/18				09/12/18	7	1	P
MW037-W-180911	598697-004	09/11/18				09/12/18	7	1	P
MW043-W-180911	598697-005	09/11/18				09/12/18	7	1	P
IW019-W-180911	598697-006	09/11/18				09/12/18	7	1	P
MW100-W-180911	598697-007	09/11/18				09/12/18	7	1	P
MW076SA-W-180911	598697-008	09/11/18				09/12/18	7	1	P
MW075SA-W-180911	598697-009	09/11/18				09/12/18	7	1	P
MW084SA-W-180911	598697-010	09/11/18				09/12/18	7	1	P
MW085SA-W-180911	598697-011	09/11/18				09/12/18	7	1	P
MW086SA-W-180911	598697-012	09/11/18				09/12/18	7	1	P
DUP03-W-180911	598697-013	09/11/18				09/12/18	7	1	P
DUP07-W-180911	598697-014	09/11/18				09/12/18	7	1	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Dissolved Metals by SW6020A

Client : ARCADIS

Work Order #: 598697

Project ID: B0048789.0004

Date Received: 09/11/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW001-W-180911	598697-001	09/11/18	09/15/18	180	4	09/16/18	180	1	P
MW046A-W-180911	598697-002	09/11/18	09/15/18	180	4	09/16/18	180	1	P
MW045-W-180911	598697-003	09/11/18	09/15/18	180	4	09/16/18	180	1	P
MW037-W-180911	598697-004	09/11/18	09/15/18	180	4	09/16/18	180	1	P
MW043-W-180911	598697-005	09/11/18	09/15/18	180	4	09/16/18	180	1	P
IW019-W-180911	598697-006	09/11/18	09/15/18	180	4	09/16/18	180	1	P
MW100-W-180911	598697-007	09/11/18	09/15/18	180	4	09/16/18	180	1	P
MW076SA-W-180911	598697-008	09/11/18	09/15/18	180	4	09/17/18	180	2	P
MW075SA-W-180911	598697-009	09/11/18	09/15/18	180	4	09/17/18	180	2	P
MW084SA-W-180911	598697-010	09/11/18	09/15/18	180	4	09/17/18	180	2	P
MW085SA-W-180911	598697-011	09/11/18	09/15/18	180	4	09/17/18	180	2	P
MW086SA-W-180911	598697-012	09/11/18	09/15/18	180	4	09/17/18	180	2	P
DUP03-W-180911	598697-013	09/11/18	09/15/18	180	4	09/17/18	180	2	P
DUP07-W-180911	598697-014	09/11/18	09/15/18	180	4	09/17/18	180	2	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : TPH By SW8015 Mod

Client : ARCADIS

Work Order #: 598697

Project ID: B0048789.0004

Date Received: 09/11/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW001-W-180911	598697-001	09/11/18	09/14/18	14	3	09/14/18	14	0	P
MW046A-W-180911	598697-002	09/11/18	09/14/18	14	3	09/15/18	14	1	P
MW045-W-180911	598697-003	09/11/18	09/14/18	14	3	09/15/18	14	1	P
MW037-W-180911	598697-004	09/11/18	09/14/18	14	3	09/15/18	14	1	P
MW043-W-180911	598697-005	09/11/18	09/14/18	14	3	09/15/18	14	1	P
IW019-W-180911	598697-006	09/11/18	09/14/18	14	3	09/15/18	14	1	P
DUP03-W-180911	598697-013	09/11/18	09/14/18	14	3	09/15/18	14	1	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : BTEX by EPA 8021B

Client : ARCADIS

Work Order #: 598697

Project ID: B0048789.0004

Date Received: 09/11/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW001-W-180911	598697-001	09/11/18				09/12/18	14	1	P
MW046A-W-180911	598697-002	09/11/18				09/12/18	14	1	P
MW045-W-180911	598697-003	09/11/18				09/12/18	14	1	P
MW037-W-180911	598697-004	09/11/18				09/12/18	14	1	P
MW043-W-180911	598697-005	09/11/18				09/12/18	14	1	P
IW019-W-180911	598697-006	09/11/18				09/12/18	14	1	P
DUP03-W-180911	598697-013	09/11/18				09/12/18	14	1	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chromium, Hexavalent by SW 7196A

Client : ARCADIS

Work Order #: 598697

Project ID: B0048789.0004

Date Received: 09/11/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Hour)	Time Held Extracted (Hour)	Date Analyzed	Max Holding Time Analyzed (Hour)	Time Held Analyzed (Hour)	Q
MW001-W-180911	598697-001	09/11/18				09/12/18	24	22	P
MW046A-W-180911	598697-002	09/11/18				09/12/18	24	21	P
MW045-W-180911	598697-003	09/11/18				09/12/18	24	21	P
MW037-W-180911	598697-004	09/11/18				09/12/18	24	21	P
MW043-W-180911	598697-005	09/11/18				09/12/18	24	20	P
IW019-W-180911	598697-006	09/11/18				09/12/18	24	20	P
MW100-W-180911	598697-007	09/11/18				09/12/18	24	20	P
MW076SA-W-180911	598697-008	09/11/18				09/12/18	24	20	P
MW075SA-W-180911	598697-009	09/11/18				09/12/18	24	20	P
MW084SA-W-180911	598697-010	09/11/18				09/12/18	24	21	P
MW085SA-W-180911	598697-011	09/11/18				09/12/18	24	21	P
MW086SA-W-180911	598697-012	09/11/18				09/12/18	24	21	P
DUP03-W-180911	598697-013	09/11/18				09/12/18	24	1	P
DUP07-W-180911	598697-014	09/11/18				09/12/18	24	1	P

F = These samples were analyzed outside the recommended holding time.

P = Samples analyzed within the recommended holding time.



Flagging Criteria



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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3062935

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 598697

Client Sample Id**Lab Sample Id****QC Types**

IW019-W-180911

598697-006

SMP

MW001-W-180911

598697-001

SMP

MW037-W-180911

598697-004

SMP

MW043-W-180911

598697-005

SMP

MW045-W-180911

598697-003

SMP

MW046A-W-180911

598697-002

SMP

MW075SA-W-180911

598697-009

SMP

MW076SA-W-180911

598697-008

SMP

MW100-W-180911

598697-007

SMP

3062935-1-BKS

BKS

3062935-1-BLK

BLK

3062935-1-BSD

BSD

598640-001 S

MS

598640-001 SD

MSD



Analytical Log

Analytical Method:	<u>BTEX by EPA 8021B</u>	Batch #:	<u>3062942</u>
Project Name:	<u>Chevron N. Eunice</u>	Project ID:	<u>B0048789.0004</u>
Client Name:	<u>ARCADIS</u>	WO Number:	<u>598697</u>

Client Sample Id	Lab Sample Id	QC Types
<u>DUP03-W-180911</u>	<u>598697-013</u>	<u>SMP</u>
<u>IW019-W-180911</u>	<u>598697-006</u>	<u>SMP</u>
<u>MW001-W-180911</u>	<u>598697-001</u>	<u>SMP</u>
<u>MW037-W-180911</u>	<u>598697-004</u>	<u>SMP</u>
<u>MW043-W-180911</u>	<u>598697-005</u>	<u>SMP</u>
<u>MW045-W-180911</u>	<u>598697-003</u>	<u>SMP</u>
<u>MW046A-W-180911</u>	<u>598697-002</u>	<u>SMP</u>
<u> </u>	<u>598532-001 S</u>	<u>MS</u>
<u> </u>	<u>598532-001 SD</u>	<u>MSD</u>
<u> </u>	<u>7662127-1-BKS</u>	<u>BKS</u>
<u> </u>	<u>7662127-1-BLK</u>	<u>BLK</u>
<u> </u>	<u>7662127-1-BSD</u>	<u>BSD</u>



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3062947

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 598697

Client Sample Id

DUP03-W-180911

DUP07-W-180911

MW084SA-W-180911

MW085SA-W-180911

MW086SA-W-180911

Lab Sample Id

598697-013

598697-014

598697-010

598697-011

598697-012

3062947-1-BKS

3062947-1-BLK

3062947-1-BSD

598697-014 S

598697-014 SD

QC Types

SMP

SMP

SMP

SMP

SMP

BKS

BLK

BSD

MS

MSD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063197
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598697

Client Sample Id	Lab Sample Id	QC Types
DUP03-W-180911	598697-013	SMP
DUP07-W-180911	598697-014	SMP
IW019-W-180911	598697-006	SMP
MW001-W-180911	598697-001	SMP
MW037-W-180911	598697-004	SMP
MW043-W-180911	598697-005	SMP
MW045-W-180911	598697-003	SMP
MW046A-W-180911	598697-002	SMP
MW075SA-W-180911	598697-009	SMP
MW076SA-W-180911	598697-008	SMP
MW084SA-W-180911	598697-010	SMP
MW085SA-W-180911	598697-011	SMP
MW086SA-W-180911	598697-012	SMP
MW100-W-180911	598697-007	SMP
	3063197-1-BKS	BKS
	3063197-1-BLK	BLK
	3063197-1-BSD	BSD
	598697-001 D	MD
	598697-014 D	MD



Analytical Log

Analytical Method: Dissolved Metals by SW6020A
 Project Name: Chevron N. Eunice
 Client Name: ARCADIS

Batch #: 3063327
 Project ID: B0048789.0004
 WO Number: 598697

Client Sample Id	Lab Sample Id	QC Types
DUP03-W-180911	598697-013	SMP
DUP07-W-180911	598697-014	SMP
IW019-W-180911	598697-006	SMP
MW001-W-180911	598697-001	SMP
MW037-W-180911	598697-004	SMP
MW043-W-180911	598697-005	SMP
MW045-W-180911	598697-003	SMP
MW046A-W-180911	598697-002	SMP
MW075SA-W-180911	598697-009	SMP
MW076SA-W-180911	598697-008	SMP
MW084SA-W-180911	598697-010	SMP
MW085SA-W-180911	598697-011	SMP
MW086SA-W-180911	598697-012	SMP
MW100-W-180911	598697-007	SMP
	598697-001 S	MS
	598697-001 SD	MSD
	7662348-1-BKS	BKS
	7662348-1-BLK	BLK
	7662348-1-BSD	BSD



Analytical Log

Analytical Method:	TPH By SW8015 Mod	Batch #:	3063336
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598697

Client Sample Id	Lab Sample Id	QC Types
DUP03-W-180911	598697-013	SMP
IW019-W-180911	598697-006	SMP
MW001-W-180911	598697-001	SMP
MW037-W-180911	598697-004	SMP
MW043-W-180911	598697-005	SMP
MW045-W-180911	598697-003	SMP
MW046A-W-180911	598697-002	SMP
	598697-001 S	MS
	598697-001 SD	MSD
	7662365-1-BKS	BKS
	7662365-1-BLK	BLK
	7662365-1-BSD	BSD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063340
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598697

Client Sample Id	Lab Sample Id	QC Types
DUP03-W-180911	598697-013	SMP
DUP07-W-180911	598697-014	SMP
IW019-W-180911	598697-006	SMP
MW001-W-180911	598697-001	SMP
MW037-W-180911	598697-004	SMP
MW043-W-180911	598697-005	SMP
MW045-W-180911	598697-003	SMP
MW046A-W-180911	598697-002	SMP
MW075SA-W-180911	598697-009	SMP
MW076SA-W-180911	598697-008	SMP
MW084SA-W-180911	598697-010	SMP
MW085SA-W-180911	598697-011	SMP
MW086SA-W-180911	598697-012	SMP
MW100-W-180911	598697-007	SMP
	598685-001 S	MS
	598685-001 SD	MSD
	598687-001 S	MS
	598687-001 SD	MSD
	7662143-1-BKS	BKS
	7662143-1-BLK	BLK
	7662143-1-BSD	BSD



Form 2 - Surrogate Recoveries

Project Name: Chevron N. Eunice

Work Orders : 598697,

Project ID: B0048789.0004

Lab Batch #: 3062942

Sample: 7662127-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/12/18 08:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	70-130	
4-Bromofluorobenzene	0.0295	0.0300	98	70-130	

Lab Batch #: 3062942

Sample: 7662127-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/12/18 08:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	70-130	
4-Bromofluorobenzene	0.0267	0.0300	89	70-130	

Lab Batch #: 3062942

Sample: 598532-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/12/18 09:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	70-130	
4-Bromofluorobenzene	0.0280	0.0300	93	70-130	

Lab Batch #: 3062942

Sample: 598532-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/12/18 09:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	70-130	
4-Bromofluorobenzene	0.0287	0.0300	96	70-130	

Lab Batch #: 3062942

Sample: 7662127-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/12/18 10:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	70-130	
4-Bromofluorobenzene	0.0290	0.0300	97	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Chevron N. Eunice

Work Orders : 598697,

Project ID: B0048789.0004

Lab Batch #: 3063336

Sample: 7662365-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/18 22:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.97	9.98	100	70-135	
o-Terphenyl	5.05	4.99	101	70-135	

Lab Batch #: 3063336

Sample: 7662365-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/18 22:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.1	9.98	121	70-135	
o-Terphenyl	5.39	4.99	108	70-135	

Lab Batch #: 3063336

Sample: 7662365-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/18 23:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.2	9.98	122	70-135	
o-Terphenyl	5.19	4.99	104	70-135	

Lab Batch #: 3063336

Sample: 598697-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/18 23:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.7	9.99	117	70-135	
o-Terphenyl	4.90	4.99	98	70-135	

Lab Batch #: 3063336

Sample: 598697-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/15/18 00:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	10.9	9.99	109	70-135	
o-Terphenyl	4.76	5.00	95	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598697

Project ID: B0048789.0004

Analyst: ALJ

Date Prepared: 09/12/2018

Date Analyzed: 09/12/2018

Lab Batch ID: 3062942

Sample: 7662127-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene		<0.000408	0.100	0.0903	90	0.100	0.101	101	11	70-130	25	
Toluene		<0.000367	0.100	0.108	108	0.100	0.104	104	4	70-130	25	
Ethylbenzene		<0.000657	0.100	0.117	117	0.100	0.110	110	6	70-130	25	
m,p-Xylenes		<0.000630	0.200	0.231	116	0.200	0.216	108	7	70-130	25	
o-Xylene		<0.000642	0.100	0.112	112	0.100	0.105	105	6	70-130	25	

Analyst: SCM

Date Prepared: 09/12/2018

Date Analyzed: 09/12/2018

Lab Batch ID: 3063340

Sample: 7662143-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride		<0.0858	25.0	25.2	101	25.0	25.1	100	0	90-110	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598697

Project ID: B0048789.0004

Analyst: OJS

Date Prepared: 09/12/2018

Date Analyzed: 09/12/2018

Lab Batch ID: 3062935

Sample: 3062935-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0409	102	0.0400	0.0410	103	0	85-115	20	

Analyst: OJS

Date Analyzed: 09/12/2018

Lab Batch ID: 3062947

Sample: 3062947-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0409	102	0.0400	0.0410	103	0	85-115	20	

Analyst: DEP

Date Prepared: 09/15/2018

Date Analyzed: 09/16/2018

Lab Batch ID: 3063327

Sample: 7662348-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.101	101	0.100	0.101	101	0	80-120	20	
Barium		<0.000484	0.100	0.100	100	0.100	0.101	101	1	80-120	20	
Chromium		<0.000525	0.100	0.0999	100	0.100	0.0980	98	2	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598697

Project ID: B0048789.0004

Analyst: OJS

Date Prepared: 09/12/2018

Date Analyzed: 09/12/2018

Lab Batch ID: 3063197

Sample: 3063197-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	TDS by SM2540C	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<5.00	1000	985	99	1000	954	95	3	80-120	10	
Total Dissolved Solids												

Analyst: ARM

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063336

Sample: 7662365-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.986	99.8	94.7	95	99.8	91.9	92	3	70-135	20	
Gasoline Range Hydrocarbons												
Diesel Range Organics		<0.911	99.8	99.7	100	99.8	93.9	94	6	70-135	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598697

Project ID: B0048789.0004

Lab Batch ID: 3062942

QC- Sample ID: 598532-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/12/2018

Date Prepared: 09/12/2018

Analyst: ALJ

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.000408	0.100	0.109	109	0.100	0.101	101	8	70-130	25	
Toluene		<0.000367	0.100	0.109	109	0.100	0.102	102	7	70-130	25	
Ethylbenzene		<0.000657	0.100	0.115	115	0.100	0.109	109	5	70-130	25	
m,p-Xylenes		<0.000630	0.200	0.228	114	0.200	0.217	109	5	70-130	25	
o-Xylene		<0.000642	0.100	0.110	110	0.100	0.105	105	5	70-130	25	

Lab Batch ID: 3063340

QC- Sample ID: 598685-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/12/2018

Date Prepared: 09/12/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		11.7	25.0	36.7	100	25.0	36.8	100	0	90-110	20	

Lab Batch ID: 3063340

QC- Sample ID: 598687-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/12/2018

Date Prepared: 09/12/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		5.21	25.0	31.1	104	25.0	31.1	104	0	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598697

Project ID: B0048789.0004

Lab Batch ID: 3062935

QC- Sample ID: 598640-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/12/2018

Date Prepared: 09/12/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.208	104	0.200	0.207	104	0	75-125	20	

Lab Batch ID: 3062947

QC- Sample ID: 598697-014 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/12/2018

Date Prepared: 09/12/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.203	102	0.200	0.203	102	0	75-125	20	

Lab Batch ID: 3063327

QC- Sample ID: 598697-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/16/2018

Date Prepared: 09/15/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.00241	0.100	0.106	104	0.100	0.107	105	1	75-125	20	
Barium		0.0518	0.100	0.160	108	0.100	0.159	107	1	75-125	20	
Chromium		0.00146	0.100	0.0989	97	0.100	0.0976	96	1	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+E)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598697

Project ID: B0048789.0004

Lab Batch ID: 3063336

QC- Sample ID: 598697-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Gasoline Range Hydrocarbons		<0.986	99.9	90.8	91	99.9	86.8	87	5	70-135	20	
Diesel Range Organics		<0.911	99.9	92.6	93	99.9	86.6	87	7	70-135	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: Chevron N. Eunice

Work Order #: 598697

Lab Batch #: 3063197

Project ID: B0048789.0004

Date Analyzed: 09/12/2018 17:10

Date Prepared: 09/12/2018

Analyst: OJS

QC- Sample ID: 598697-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	2610	2530	3	10	

Lab Batch #: 3063197

Date Analyzed: 09/12/2018 17:10

Date Prepared: 09/12/2018

Analyst: OJS

QC- Sample ID: 598697-014 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	1730	1750	1	10	

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

BRL - Below Reporting Limit

Attachment A Laboratory Data Package Cover Page

Project Name: **Chevron N. Eunice**Laboratory Number: **598697**This Data package consists of : Laboratory Batch No(s) **3063336, 3063340, 3063197, 3062942, 3062**

This signature page, the laboratory review checklist, and the following reportable data:

- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- a) Items consistent with NELAC 5
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs) and
 - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
- a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies, observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC 25.6 and was last inspection by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Brooks
Name (Printed)


Signature

Project Manager
Official Title (printed)

19-SEP-18
Date

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES		LRC Date :		19-SEP-18	
Project Name:		Chevron N. Eunice		Laboratory Job Number :		598697	
Reviewer Name:		KEB		Batch Number(s) :		3063336, 3063340, 3063197, 3062942, 3062935, 3062947, 3063327	
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-Custody (COC)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and Quality Control (QC) Identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test Reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results <MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, were TICs reported?			X		
R4	O	Surrogate Recovery Data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test Reports/Summary Forms for Blank Samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency ?	X				
		Were method blanks taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures ?	X				
		Were Blank Concentrations <MQL?	X				
R6	OI	Laboratory Control Samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within the QC limits?	X				
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within the laboratory QC limits?	X				
R8	OI	Analytical Duplicate Data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method Quantitation Limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES	LRC Date :		19-SEP-18				
Project Name:		Chevron N. Eunice	Laboratory Job Number :		598697				
Reviewer Name:		KEB	Batch Number(s) :		3063336, 3063340, 3063197, 3062942, 3062935, 3062947, 3063327				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵		
S1	OI	Initial Calibration (ICAL)							
		Were response factors and/or relative response factors for each analyte within QC limits?	X						
		Were percent RSDs or correlation coefficient criteria met?	X						
		Was the number of standards recommended in the method used for all analytes?	X						
		Were all points generated between the lowest and the highest standard used to calculate the curve?	X						
		Are ICAL data available for all instruments used?	X						
		Has the initial calibration curve been verified using an appropriate second source standard?	X						
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and continuing calibration blank							
		Was the CCV analyzed at the method-required frequency?	X						
		Were percent differences for each analyte within the method-required QC limits?	X						
		Was the ICAL curve verified for each analyte?	X						
		Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	X						
S3	O	Mass Spectral Tuning							
		Was the appropriate compound for the method used for tuning?			X				
		Were ion abundance data within the method-required QC limits?			X				
S4	O	Internal Standard (IS)							
		Were IS area counts and retention times within the method-required QC limits?	X						
S5	OI	Raw Data (NELAC 5.5.10)							
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X						
		Were data associated with manual integrations flagged on the raw data?	X						
S6	O	Dual Column Confirmation							
		Did dual column confirmation results meet the method-required QC?			X				
S7	O	Tentatively Identified Compounds (TICs)							
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X				
S8	I	Interference Check Sample (ICS) Results							
		Were percent recoveries within method QC limits?	X						
S9	I	Serial Dilutions, Post Digestions Spikes, and Method of Standard Additions							
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X						
S10	OI	Method Detection Limit (MDL) Studies							
		Was a MDL study performed for each reported analyte?	X						
		Is the MDL either adjusted or supported by the analysis of DCSs?	X						
S11	OI	Proficiency Test Reports							
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X						
S12	OI	Standards Documentation							
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X						
S13	OI	Compound/Analyte Identification Procedures							
		Are the procedures for compound/analyte identification documented?	X						
S14	OI	Demonstration of Analyst Competency (DOC)							
		Was DOC conducted consistent with NELAC Chapter 5?	X						
		Is documentation of the analyst's competency up-to-date and on file?	X						
S15	OI	Verification/Validation Documentation for Methods (NELAC Chapter 5)							
		Are all methods used to generate the data documented, verified, and validated, where applicable?	X						
S16	OI	Laboratory Standard Operating Procedures (SOPs)							
		Are laboratory SOPs current and on file for each method performed?	X						

- Items identified by the letter "R" must be included in the laboratory data package submitted to the TCEQ-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Attachment A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: XENCO LABORATORIES	LRC Date: 19-SEP-18
Project Name: Chevron N. Eunice	Laboratory Job Number: 598697
Reviewer Name: KEB	Batch Number(s) : 3063336, 3063340, 3063197, 3062942, 3062935, 3062947, 3063327
ER# 1	DESCRIPTION
1	SW8021BM Batch 3062942, Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis. Samples affected are: 598697-005.

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No is checked on the LRC).



DCS Summary

598697



ARCADIS, Midland, TX

Chevron N. Eunice

Analytical Method: **Chloride by EPA 300**Matrix: **Water**Prep Method: **E300P**Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chloride	0.0858	0.500	0.250	0.177	mg/L

Analytical Method: **Chromium, Hexavalent by SW 7196A**Matrix: **Water**

Prep Method:

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chromium, Hexavalent	0.00273	0.0100	0.00800	0.00510	mg/L

Analytical Method: **Dissolved Metals by SW6020A**Matrix: **Water**Prep Method: **SW3010A**Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Arsenic	0.000246	0.00400	0.00200	0.00294	mg/L
Barium	0.000484	0.00400	0.00400	0.00401	mg/L
Chromium	0.000525	0.00400	0.00200	0.00400	mg/L



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Lab Work Order #

Page 1 of 1

Contact & Company Name:		Telephone:	
Brett Krehbiel Arcadis		916-786-0320	
Address:		Fax:	
101 Creekside Ridge Court, Suite 200		916-786-0366	
City State Zip		E-mail Address:	
Roseville CA 95678		brett.krehbiel@arcadis.com	
Project Name/Location (City, State):		Project #:	
Chevron N. Eunice		B0048789.0004	
Sampler's Printed Name:		Sampler's Signature:	
GARY S. LONGWELL			

Sample ID	Collection		Type (✓)		Matrix
	Date	Time	Comp	Grab	
MW0001-N-180911	09/11/18	11:50		X	W
MW0046A-N-180911	09/11/18	12:20		X	W
MW0045-N-180911	09/11/18	12:26		X	W
MW0037-W-180911	09/11/18	12:49		X	W
MW0043-W-180911	09/11/18	13:46		X	W
TD0019-W-180911	09/11/18	13:12		X	W
MW0100-N-180911	09/11/18	13:42		X	W
MW0076SA-N-180911	09/11/18	14:02		X	W
MW0075SA-N-180911	09/11/18	14:12		X	W
MW0084SA-N-180911	09/11/18	14:23		X	W
MW0085SA-W-180911	09/11/18	14:32		X	W
MW0086SA-W-180911	09/11/18	14:47		X	W
DD0003-N-180911	09/11/18			X	W
DD0007-N-180911	09/11/18			X	W

Special Instructions/Comments:

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name:	cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:
Xenco		GARY S. LONGWELL		WILSON DEAN		WILSON DEAN		JULIO MARTINEZ	
Specify Turnaround Requirements:	Sample Receipt:	Firm:	Signature:	Firm:	Signature:	Firm:	Signature:	Firm:	Signature:
Standard TAT	Condition/Cooler Temp. 0.3100	Arcadis		Xenco		Xenco		Xenco	
Shipping Tracking #:		Date/Time:	09/11/18 16:58	Date/Time:	09/11/18 16:58	Date/Time:	09/11/18 16:58	Date/Time:	09/11/18 19:00

Inter-Office Shipment

Page 1 of 1

IOS Number 113764

Date/Time: 09/12/18 08:16

Created by: Brianna Teel

Please send report to: Kelsey Brooks

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave, Midland TX 79701

Lab# To: **Houston**

Air Bill No.: 773204462358

E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
598697-001	W	MW001-W-180911	09/11/18 11:50	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-002	W	MW046A-W-180911	09/11/18 12:20	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-003	W	MW045-W-180911	09/11/18 12:26	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-004	W	MW037-W-180911	09/11/18 12:49	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-005	W	MW043-W-180911	09/11/18 13:46	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-006	W	IW019-W-180911	09/11/18 13:17	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-007	W	MW100-W-180911	09/11/18 13:42	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-008	W	MW076SA-W-180911	09/11/18 14:02	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-009	W	MW075SA-W-180911	09/11/18 14:12	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-010	W	MW084SA-W-180911	09/11/18 14:23	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-011	W	MW085SA-W-180911	09/11/18 14:32	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-012	W	MW086SA-W-180911	09/11/18 14:47	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-013	W	DUP03-W-180911	09/11/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	
598697-014	W	DUP07-W-180911	09/11/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/17/18	03/10/19	KEB	AS BA CR	

Inter Office Shipment or Sample Comments:

Relinquished By:

Brianna Teel

Brianna Teel

Received By:

Maria Paula Guerra

Maria Paula Guerra

Date Relinquished: 09/12/2018

Date Received: 09/13/2018 09:30

Cooler Temperature: 4.5



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 113764

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR:HOU068

Sent By: Brianna Teel

Date Sent: 09/12/2018 08:16 AM

Received By: Maria Paula Guerra

Date Received: 09/13/2018 09:30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	4.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Maria Paula Guerra

Date: 09/13/2018



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 09/11/2018 07:00:00 PM

Work Order #: 598697

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Metals to Stafford
#18 Water VOC samples have zero headspace?	Yes	

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

Analyst: BT

PH Device/Lot#: 213315

Checklist completed by:

Brianna Teel

Date: 09/12/2018

Checklist reviewed by:

Kelsey Brooks

Date: 09/13/2018

Analytical Report 598921

for

ARCADIS

Project Manager: Brett Krehbiel

Chevron N. Eunice

B0048789.0004

19-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

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

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

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



Table of Contents

Cover Page	1
Cover Letter	3
Sample ID Cross Reference	4
LCASE_NARR_SUMMARY	5
Certificate of Analysis (Detailed Report)	6
Chronology of Holding Times	33
Explanation of Qualifiers (Flags)	37
Analytical Log	38
LCS / LCSD Recoveries	48
MS / MSD Recoveries	52
Method Duplicate	56
Laboratory Review Checklist	57
DCS_SUMMARY	61
Chain of Custody	62
IOS_COC_113951	64
IOS_Check_List_113951	66
Sample Receipt Conformance Report	67



19-SEP-18

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **598921**

Chevron N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 598921. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 598921 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW071SA-W-180912	W	09-12-18 09:11		598921-001
MW074SA-W-180912	W	09-12-18 09:26		598921-002
MW056SA-W-180912	W	09-12-18 09:42		598921-003
MW055SA-W-180912	W	09-12-18 09:54		598921-004
MW066SA-W-180912	W	09-12-18 10:05		598921-005
MW073SA-W-180912	W	09-12-18 10:16		598921-006
MW072SA-W-180912	W	09-12-18 11:35		598921-007
MW021SA-W-180912	W	09-12-18 11:48		598921-008
MW050SA-W-180912	W	09-12-18 11:59		598921-009
MW051SA-W-180912	W	09-12-18 12:11		598921-010
MW079SA-W-180912	W	09-12-18 12:25		598921-011
MW054SA-W-180912	W	09-12-18 12:42		598921-012
DUP04-W-180912	W	09-12-18 00:00		598921-013
DUP05-W-180912	W	09-12-18 00:00		598921-014
MW052SA-W-180912	W	09-12-18 13:09		598921-015
MW049SA-W-180912	W	09-12-18 13:20		598921-016
MW048SA-W-180912	W	09-12-18 13:32		598921-017
MW041A-W-180912	W	09-12-18 13:44		598921-018
MW062A-W-180912	W	09-12-18 14:03		598921-019
MW063A-W-180912	W	09-12-18 14:14		598921-020
MW024A-W-180912	W	09-12-18 14:43		598921-021
MW070A-W-180912	W	09-12-18 15:02		598921-022
Dup02-W-180912	W	09-12-18 00:00		598921-023
MW057SA-W-180912	W	09-12-18 11:35		598921-024



CASE NARRATIVE SUMMARY



Client Name: *ARCADIS*

Project Name: *Chevron N. Eunice*

Project ID: *B0048789.0004*

Work Order Number: *598921*

Report Date: *19-SEP-18*

Date Received: *12-SEP-18*

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

Kelsey Brooks
Project Manager



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW071SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-001

Date Collected: 09.12.18 09.11

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1580	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	613	5.00	0.858	mg/L	09.14.18 04:28		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00951	0.00400	0.000246	mg/L	09.17.18 00:28		1
Barium	7440-39-3	0.0829	0.00400	0.000484	mg/L	09.17.18 00:28		1
Chromium	7440-47-3	0.00142	0.00400	0.000525	mg/L	09.17.18 00:28	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW074SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-002

Date Collected: 09.12.18 09.26

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1510	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	376	5.00	0.858	mg/L	09.14.18 04:39		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0152	0.00400	0.000246	mg/L	09.17.18 00:31		1
Barium	7440-39-3	0.0349	0.00400	0.000484	mg/L	09.17.18 00:31		1
Chromium	7440-47-3	0.00517	0.00400	0.000525	mg/L	09.17.18 00:31		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW056SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-003

Date Collected: 09.12.18 09.42

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3380	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1130	25.0	4.29	mg/L	09.14.18 04:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0155	0.00400	0.000246	mg/L	09.17.18 00:35		1
Barium	7440-39-3	0.0252	0.00400	0.000484	mg/L	09.17.18 00:35		1
Chromium	7440-47-3	0.417	0.00400	0.000525	mg/L	09.17.18 00:35		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.401	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW055SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-004

Date Collected: 09.12.18 09.54

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1660	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	622	10.0	1.72	mg/L	09.14.18 05:24		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00784	0.00400	0.000246	mg/L	09.17.18 00:38		1
Barium	7440-39-3	0.0259	0.00400	0.000484	mg/L	09.17.18 00:38		1
Chromium	7440-47-3	0.171	0.00400	0.000525	mg/L	09.17.18 00:38		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.166	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW066SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-005

Date Collected: 09.12.18 10.05

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2350	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	884	10.0	1.72	mg/L	09.14.18 17:06		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00987	0.00400	0.000246	mg/L	09.17.18 00:41		1
Barium	7440-39-3	0.0345	0.00400	0.000484	mg/L	09.17.18 00:41		1
Chromium	7440-47-3	0.0186	0.00400	0.000525	mg/L	09.17.18 00:41		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0137	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW073SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-006

Date Collected: 09.12.18 10.16

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	965	5.00	5.00	mg/L	09.13.18 16:30		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	229	5.00	0.858	mg/L	09.14.18 17:14		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0112	0.00400	0.000246	mg/L	09.18.18 15:36		1
Barium	7440-39-3	0.0397	0.00400	0.000484	mg/L	09.18.18 15:36		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 15:36	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW072SA-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-007

Date Collected: 09.12.18 11.35

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1090	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	238	5.00	0.858	mg/L	09.14.18 17:21		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0179	0.00400	0.000246	mg/L	09.18.18 15:40		1
Barium	7440-39-3	0.0295	0.00400	0.000484	mg/L	09.18.18 15:40		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 15:40	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW021SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-008

Date Collected: 09.12.18 11.48

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	5170	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2330	25.0	4.29	mg/L	09.14.18 17:29		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0106	0.00400	0.000246	mg/L	09.18.18 15:43		1
Barium	7440-39-3	0.0274	0.00400	0.000484	mg/L	09.18.18 15:43		1
Chromium	7440-47-3	0.00352	0.00400	0.000525	mg/L	09.18.18 15:43	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW050SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-009

Date Collected: 09.12.18 11.59

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3580	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1510	25.0	4.29	mg/L	09.14.18 17:36		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00822	0.00400	0.000246	mg/L	09.18.18 15:46		1
Barium	7440-39-3	0.0341	0.00400	0.000484	mg/L	09.18.18 15:46		1
Chromium	7440-47-3	0.442	0.00400	0.000525	mg/L	09.18.18 15:46		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.405	0.0100	0.00273	mg/L	09.13.18 08:05		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW051SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-010

Date Collected: 09.12.18 12.11

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3300	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1120	25.0	4.29	mg/L	09.14.18 17:43		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	09.18.18 15:49		1
Barium	7440-39-3	0.0137	0.00400	0.000484	mg/L	09.18.18 15:49		1
Chromium	7440-47-3	0.799	0.00400	0.000525	mg/L	09.18.18 15:49		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.668	0.0500	0.0136	mg/L	09.13.18 08:05		5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW079SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-011

Date Collected: 09.12.18 12.25

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1140	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	270	5.00	0.858	mg/L	09.14.18 17:51		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00709	0.00400	0.000246	mg/L	09.18.18 15:52		1
Barium	7440-39-3	0.0416	0.00400	0.000484	mg/L	09.18.18 15:52		1
Chromium	7440-47-3	0.000775	0.00400	0.000525	mg/L	09.18.18 15:52	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW054SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-012

Date Collected: 09.12.18 12.42

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	800	10.0	1.72	mg/L	09.14.18 17:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0107	0.00400	0.000246	mg/L	09.18.18 15:56		1
Barium	7440-39-3	0.0422	0.00400	0.000484	mg/L	09.18.18 15:56		1
Chromium	7440-47-3	0.131	0.00400	0.000525	mg/L	09.18.18 15:56		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.115	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **DUP04-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-013

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1970	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.14.18 18:06		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0108	0.00400	0.000246	mg/L	09.18.18 15:59		1
Barium	7440-39-3	0.0414	0.00400	0.000484	mg/L	09.18.18 15:59		1
Chromium	7440-47-3	0.129	0.00400	0.000525	mg/L	09.18.18 15:59		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.118	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP05-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-014

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1030	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	269	5.00	0.858	mg/L	09.14.18 18:13		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00707	0.00400	0.000246	mg/L	09.18.18 16:02		1
Barium	7440-39-3	0.0429	0.00400	0.000484	mg/L	09.18.18 16:02		1
Chromium	7440-47-3	0.000783	0.00400	0.000525	mg/L	09.18.18 16:02	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW052SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-015

Date Collected: 09.12.18 13.09

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3020	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1400	25.0	4.29	mg/L	09.14.18 18:43		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0131	0.00400	0.000246	mg/L	09.18.18 16:18		1
Barium	7440-39-3	0.0233	0.00400	0.000484	mg/L	09.18.18 16:18		1
Chromium	7440-47-3	0.242	0.00400	0.000525	mg/L	09.18.18 16:18		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.222	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW049SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-016

Date Collected: 09.12.18 13.20

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2960	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1300	25.0	4.29	mg/L	09.14.18 18:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.00400	0.000246	mg/L	09.18.18 16:21		1
Barium	7440-39-3	0.0190	0.00400	0.000484	mg/L	09.18.18 16:21		1
Chromium	7440-47-3	0.188	0.00400	0.000525	mg/L	09.18.18 16:21		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.171	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW048SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-017

Date Collected: 09.12.18 13.32

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1960	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	583	10.0	1.72	mg/L	09.14.18 18:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0119	0.00400	0.000246	mg/L	09.18.18 16:24		1
Barium	7440-39-3	0.0156	0.00400	0.000484	mg/L	09.18.18 16:24		1
Chromium	7440-47-3	0.453	0.00400	0.000525	mg/L	09.18.18 16:24		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.404	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW041A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-018

Date Collected: 09.12.18 13.44

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	403	5.00	0.858	mg/L	09.15.18 00:47		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0103	0.00400	0.000246	mg/L	09.18.18 16:28		1
Barium	7440-39-3	0.0241	0.00400	0.000484	mg/L	09.18.18 16:28		1
Chromium	7440-47-3	0.206	0.00400	0.000525	mg/L	09.18.18 16:28		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.167	0.0100	0.00273	mg/L	09.13.18 10:00		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW062A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-019

Date Collected: 09.12.18 14.03

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	497	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	57.9	2.50	0.429	mg/L	09.15.18 00:55		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0240	0.00400	0.000246	mg/L	09.18.18 16:31		1
Barium	7440-39-3	0.0347	0.00400	0.000484	mg/L	09.18.18 16:31		1
Chromium	7440-47-3	0.00213	0.00400	0.000525	mg/L	09.18.18 16:31	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW063A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-020

Date Collected: 09.12.18 14.14

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	472	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.7	2.50	0.429	mg/L	09.15.18 01:02		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0233	0.00400	0.000246	mg/L	09.18.18 16:34		1
Barium	7440-39-3	0.0375	0.00400	0.000484	mg/L	09.18.18 16:34		1
Chromium	7440-47-3	0.00162	0.00400	0.000525	mg/L	09.18.18 16:34	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **MW024A-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-021

Date Collected: 09.12.18 14.43

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2420	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	901	10.0	1.72	mg/L	09.15.18 01:10		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0125	0.00400	0.000246	mg/L	09.18.18 16:37		1
Barium	7440-39-3	0.0359	0.00400	0.000484	mg/L	09.18.18 16:37		1
Chromium	7440-47-3	0.579	0.00400	0.000525	mg/L	09.18.18 16:37		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.477	0.0500	0.0136	mg/L	09.13.18 11:15		5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW070A-W-180912

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-022

Date Collected: 09.12.18 15.02

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1120	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	387	5.00	0.858	mg/L	09.15.18 01:39		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0145	0.00400	0.000246	mg/L	09.18.18 20:02		1
Barium	7440-39-3	0.0982	0.00400	0.000484	mg/L	09.18.18 20:02		1
Chromium	7440-47-3	0.000838	0.00400	0.000525	mg/L	09.18.18 20:02	J	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 11:15	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **Dup02-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-023

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2310	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	894	10.0	1.72	mg/L	09.15.18 01:47		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0126	0.00400	0.000246	mg/L	09.19.18 15:34		1
Barium	7440-39-3	0.0386	0.00400	0.000484	mg/L	09.19.18 15:34		1
Chromium	7440-47-3	0.547	0.00400	0.000525	mg/L	09.19.18 15:34		1

Sample Id: **Dup02-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-023

Date Collected: 09.12.18 00.00

Date Received: 09.12.18 19.00

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.520	0.0500	0.0136	mg/L	09.13.18 11:15	K	5



Certificate of Analytical Results

598921



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW057SA-W-180912**

Matrix: Water

Sample Depth:

Lab Sample Id: 598921-024

Date Collected: 09.12.18 11.35

Date Received: 09.12.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1450	5.00	5.00	mg/L	09.13.18 15:45		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	346	5.00	0.858	mg/L	09.15.18 01:54		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0127	0.00400	0.000246	mg/L	09.19.18 15:37		1
Barium	7440-39-3	0.0784	0.00400	0.000484	mg/L	09.19.18 15:37		1
Chromium	7440-47-3	0.0387	0.00400	0.000525	mg/L	09.19.18 15:37		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0276	0.0100	0.00273	mg/L	09.13.18 11:15		1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **3063018-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063018-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063018

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 08:05	U	1

Sample Id: **3063019-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063019-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063019

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 10:00	U	1

Sample Id: **3063022-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063022-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063022

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.13.18 11:15	U	1

Sample Id: **3063197-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063197-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063197

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.12.18 17:10	U	1



Certificate of Analytical Results

598921

ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **3063326-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063326-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063326

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.13.18 15:45	U	1

Sample Id: **7662262-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662262-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063369

Date Prep: 09.13.18 15.00

Prep seq: 7662262

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.14.18 03:10	U	1
Nitrate as N	14797-55-8	<0.0157	0.100	0.0157	mg/L	09.14.18 03:10	U	1
Nitrite as N	14797-65-0	<0.0159	0.100	0.0159	mg/L	09.14.18 03:10	U	1

Sample Id: **7662274-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662274-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063374

Date Prep: 09.14.18 12.33

Prep seq: 7662274

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.14.18 23:40	U	1



Certificate of Analytical Results

598921



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **7662348-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662348-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: MLI

Seq Number: 3063327

Date Prep: 09.15.18 11.05

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662348

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.16.18 23:09	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.16.18 23:09	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.16.18 23:09	U	1

Sample Id: **7662384-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662384-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 13:48	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 13:48	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 13:48	U	1

Sample Id: **7662476-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662476-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 19:52	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 19:52	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 19:52	U	1



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chloride by EPA 300

Client : ARCADIS

Work Order #: 598921

Project ID: B0048789.0004

Date Received: 09/12/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW071SA-W-180912	598921-001	09/12/18				09/14/18	28	2	P
MW074SA-W-180912	598921-002	09/12/18				09/14/18	28	2	P
MW056SA-W-180912	598921-003	09/12/18				09/14/18	28	2	P
MW055SA-W-180912	598921-004	09/12/18				09/14/18	28	2	P
MW066SA-W-180912	598921-005	09/12/18				09/14/18	28	2	P
MW073SA-W-180912	598921-006	09/12/18				09/14/18	28	2	P
MW072SA-W-180912	598921-007	09/12/18				09/14/18	28	2	P
MW021SA-W-180912	598921-008	09/12/18				09/14/18	28	2	P
MW050SA-W-180912	598921-009	09/12/18				09/14/18	28	2	P
MW051SA-W-180912	598921-010	09/12/18				09/14/18	28	2	P
MW079SA-W-180912	598921-011	09/12/18				09/14/18	28	2	P
MW054SA-W-180912	598921-012	09/12/18				09/14/18	28	2	P
DUP04-W-180912	598921-013	09/12/18				09/14/18	28	2	P
DUP05-W-180912	598921-014	09/12/18				09/14/18	28	2	P
MW052SA-W-180912	598921-015	09/12/18				09/14/18	28	2	P
MW049SA-W-180912	598921-016	09/12/18				09/14/18	28	2	P
MW048SA-W-180912	598921-017	09/12/18				09/14/18	28	2	P
MW041A-W-180912	598921-018	09/12/18				09/15/18	28	3	P
MW062A-W-180912	598921-019	09/12/18				09/15/18	28	3	P
MW063A-W-180912	598921-020	09/12/18				09/15/18	28	3	P
MW024A-W-180912	598921-021	09/12/18				09/15/18	28	3	P
MW070A-W-180912	598921-022	09/12/18				09/15/18	28	3	P
Dup02-W-180912	598921-023	09/12/18				09/15/18	28	3	P
MW057SA-W-180912	598921-024	09/12/18				09/15/18	28	3	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : TDS by SM2540C

Client : ARCADIS

Work Order #: 598921

Project ID: B0048789.0004

Date Received: 09/12/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW071SA-W-180912	598921-001	09/12/18				09/13/18	7	1	P
MW074SA-W-180912	598921-002	09/12/18				09/13/18	7	1	P
MW056SA-W-180912	598921-003	09/12/18				09/13/18	7	1	P
MW055SA-W-180912	598921-004	09/12/18				09/13/18	7	1	P
MW066SA-W-180912	598921-005	09/12/18				09/13/18	7	1	P
MW073SA-W-180912	598921-006	09/12/18				09/13/18	7	1	P
MW072SA-W-180912	598921-007	09/12/18				09/13/18	7	1	P
MW021SA-W-180912	598921-008	09/12/18				09/13/18	7	1	P
MW050SA-W-180912	598921-009	09/12/18				09/13/18	7	1	P
MW051SA-W-180912	598921-010	09/12/18				09/13/18	7	1	P
MW079SA-W-180912	598921-011	09/12/18				09/13/18	7	1	P
MW054SA-W-180912	598921-012	09/12/18				09/13/18	7	1	P
DUP04-W-180912	598921-013	09/12/18				09/13/18	7	1	P
DUP05-W-180912	598921-014	09/12/18				09/13/18	7	1	P
MW052SA-W-180912	598921-015	09/12/18				09/13/18	7	1	P
MW049SA-W-180912	598921-016	09/12/18				09/13/18	7	1	P
MW048SA-W-180912	598921-017	09/12/18				09/13/18	7	1	P
MW041A-W-180912	598921-018	09/12/18				09/13/18	7	1	P
MW062A-W-180912	598921-019	09/12/18				09/13/18	7	1	P
MW063A-W-180912	598921-020	09/12/18				09/13/18	7	1	P
MW024A-W-180912	598921-021	09/12/18				09/13/18	7	1	P
MW070A-W-180912	598921-022	09/12/18				09/13/18	7	1	P
Dup02-W-180912	598921-023	09/12/18				09/13/18	7	1	P
MW057SA-W-180912	598921-024	09/12/18				09/13/18	7	1	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Dissolved Metals by SW6020A

Client : ARCADIS

Work Order #: 598921

Project ID: B0048789.0004

Date Received: 09/12/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW071SA-W-180912	598921-001	09/12/18	09/15/18	180	3	09/17/18	180	2	P
MW074SA-W-180912	598921-002	09/12/18	09/15/18	180	3	09/17/18	180	2	P
MW056SA-W-180912	598921-003	09/12/18	09/15/18	180	3	09/17/18	180	2	P
MW055SA-W-180912	598921-004	09/12/18	09/15/18	180	3	09/17/18	180	2	P
MW066SA-W-180912	598921-005	09/12/18	09/15/18	180	3	09/17/18	180	2	P
MW073SA-W-180912	598921-006	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW072SA-W-180912	598921-007	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW021SA-W-180912	598921-008	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW050SA-W-180912	598921-009	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW051SA-W-180912	598921-010	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW079SA-W-180912	598921-011	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW054SA-W-180912	598921-012	09/12/18	09/17/18	180	5	09/18/18	180	1	P
DUP04-W-180912	598921-013	09/12/18	09/17/18	180	5	09/18/18	180	1	P
DUP05-W-180912	598921-014	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW052SA-W-180912	598921-015	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW049SA-W-180912	598921-016	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW048SA-W-180912	598921-017	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW041A-W-180912	598921-018	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW062A-W-180912	598921-019	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW063A-W-180912	598921-020	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW024A-W-180912	598921-021	09/12/18	09/17/18	180	5	09/18/18	180	1	P
MW070A-W-180912	598921-022	09/12/18	09/18/18	180	6	09/18/18	180	0	P
Dup02-W-180912	598921-023	09/12/18	09/18/18	180	6	09/19/18	180	1	P
MW057SA-W-180912	598921-024	09/12/18	09/18/18	180	6	09/19/18	180	1	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chromium, Hexavalent by SW 7196A

Client : ARCADIS

Work Order #: 598921

Project ID: B0048789.0004

Date Received: 09/12/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Hour)	Time Held Extracted (Hour)	Date Analyzed	Max Holding Time Analyzed (Hour)	Time Held Analyzed (Hour)	Q
MW071SA-W-180912	598921-001	09/12/18				09/13/18	24	23	P
MW074SA-W-180912	598921-002	09/12/18				09/13/18	24	23	P
MW056SA-W-180912	598921-003	09/12/18				09/13/18	24	22	P
MW055SA-W-180912	598921-004	09/12/18				09/13/18	24	22	P
MW066SA-W-180912	598921-005	09/12/18				09/13/18	24	22	P
MW073SA-W-180912	598921-006	09/12/18				09/13/18	24	22	P
MW072SA-W-180912	598921-007	09/12/18				09/13/18	24	21	P
MW021SA-W-180912	598921-008	09/12/18				09/13/18	24	20	P
MW050SA-W-180912	598921-009	09/12/18				09/13/18	24	20	P
MW051SA-W-180912	598921-010	09/12/18				09/13/18	24	20	P
MW079SA-W-180912	598921-011	09/12/18				09/13/18	24	22	P
MW054SA-W-180912	598921-012	09/12/18				09/13/18	24	21	P
DUP04-W-180912	598921-013	09/12/18				09/13/18	24	1	P
DUP05-W-180912	598921-014	09/12/18				09/13/18	24	1	P
MW052SA-W-180912	598921-015	09/12/18				09/13/18	24	21	P
MW049SA-W-180912	598921-016	09/12/18				09/13/18	24	21	P
MW048SA-W-180912	598921-017	09/12/18				09/13/18	24	20	P
MW041A-W-180912	598921-018	09/12/18				09/13/18	24	20	P
MW062A-W-180912	598921-019	09/12/18				09/13/18	24	20	P
MW063A-W-180912	598921-020	09/12/18				09/13/18	24	20	P
MW024A-W-180912	598921-021	09/12/18				09/13/18	24	21	P
MW070A-W-180912	598921-022	09/12/18				09/13/18	24	20	P
Dup02-W-180912	598921-023	09/12/18				09/13/18	24	1	P
MW057SA-W-180912	598921-024	09/12/18				09/13/18	24	24	P

F = These samples were analyzed outside the recommended holding time.

P = Samples analyzed within the recommended holding time.



Flagging Criteria



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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063018

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 598921

Client Sample Id**Lab Sample Id****QC Types**

MW021SA-W-180912

598921-008

SMP

MW050SA-W-180912

598921-009

SMP

MW051SA-W-180912

598921-010

SMP

MW055SA-W-180912

598921-004

SMP

MW056SA-W-180912

598921-003

SMP

MW066SA-W-180912

598921-005

SMP

MW071SA-W-180912

598921-001

SMP

MW072SA-W-180912

598921-007

SMP

MW073SA-W-180912

598921-006

SMP

MW074SA-W-180912

598921-002

SMP

3063018-1-BKS

BKS

3063018-1-BLK

BLK

3063018-1-BSD

BSD

598921-001 S

MS

598921-001 SD

MSD



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063019

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 598921

Client Sample Id**Lab Sample Id****QC Types**

DUP04-W-180912

598921-013

SMP

DUP05-W-180912

598921-014

SMP

MW041A-W-180912

598921-018

SMP

MW048SA-W-180912

598921-017

SMP

MW049SA-W-180912

598921-016

SMP

MW052SA-W-180912

598921-015

SMP

MW054SA-W-180912

598921-012

SMP

MW062A-W-180912

598921-019

SMP

MW063A-W-180912

598921-020

SMP

MW079SA-W-180912

598921-011

SMP

3063019-1-BKS

BKS

3063019-1-BLK

BLK

3063019-1-BSD

BSD

598921-011 S

MS

598921-011 SD

MSD



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063022

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 598921

Client Sample Id

Dup02-W-180912

MW024A-W-180912

MW057SA-W-180912

MW070A-W-180912

Lab Sample Id

598921-023

598921-021

598921-024

598921-022

3063022-1-BKS

3063022-1-BLK

3063022-1-BSD

598921-022 S

598921-022 SD

QC Types

SMP

SMP

SMP

SMP

BKS

BLK

BSD

MS

MSD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063197
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598921

Client Sample Id	Lab Sample Id	QC Types
MW055SA-W-180912	598921-004	SMP
MW056SA-W-180912	598921-003	SMP
MW066SA-W-180912	598921-005	SMP
MW071SA-W-180912	598921-001	SMP
MW073SA-W-180912	598921-006	SMP
MW074SA-W-180912	598921-002	SMP
	3063197-1-BKS	BKS
	3063197-1-BLK	BLK
	3063197-1-BSD	BSD
	598697-001 D	MD
	598697-014 D	MD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063326
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598921

Client Sample Id	Lab Sample Id	QC Types
DUP04-W-180912	598921-013	SMP
DUP05-W-180912	598921-014	SMP
Dup02-W-180912	598921-023	SMP
MW021SA-W-180912	598921-008	SMP
MW024A-W-180912	598921-021	SMP
MW041A-W-180912	598921-018	SMP
MW048SA-W-180912	598921-017	SMP
MW049SA-W-180912	598921-016	SMP
MW050SA-W-180912	598921-009	SMP
MW051SA-W-180912	598921-010	SMP
MW052SA-W-180912	598921-015	SMP
MW054SA-W-180912	598921-012	SMP
MW057SA-W-180912	598921-024	SMP
MW062A-W-180912	598921-019	SMP
MW063A-W-180912	598921-020	SMP
MW070A-W-180912	598921-022	SMP
MW072SA-W-180912	598921-007	SMP
MW079SA-W-180912	598921-011	SMP
	3063326-1-BKS	BKS
	3063326-1-BLK	BLK
	3063326-1-BSD	BSD
	598921-007 D	MD
	598921-024 D	MD



Analytical Log

Analytical Method:	Dissolved Metals by SW6020A	Batch #:	3063327
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598921

Client Sample Id	Lab Sample Id	QC Types
MW055SA-W-180912	598921-004	SMP
MW056SA-W-180912	598921-003	SMP
MW066SA-W-180912	598921-005	SMP
MW071SA-W-180912	598921-001	SMP
MW074SA-W-180912	598921-002	SMP
	598697-001 S	MS
	598697-001 SD	MSD
	7662348-1-BKS	BKS
	7662348-1-BLK	BLK
	7662348-1-BSD	BSD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063369
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598921

Client Sample Id	Lab Sample Id	QC Types
DUP04-W-180912	598921-013	SMP
DUP05-W-180912	598921-014	SMP
MW021SA-W-180912	598921-008	SMP
MW048SA-W-180912	598921-017	SMP
MW049SA-W-180912	598921-016	SMP
MW050SA-W-180912	598921-009	SMP
MW051SA-W-180912	598921-010	SMP
MW052SA-W-180912	598921-015	SMP
MW054SA-W-180912	598921-012	SMP
MW055SA-W-180912	598921-004	SMP
MW056SA-W-180912	598921-003	SMP
MW066SA-W-180912	598921-005	SMP
MW071SA-W-180912	598921-001	SMP
MW072SA-W-180912	598921-007	SMP
MW073SA-W-180912	598921-006	SMP
MW074SA-W-180912	598921-002	SMP
MW079SA-W-180912	598921-011	SMP
	598918-001 S	MS
	598918-001 SD	MSD
	598920-001 S	MS
	598920-001 SD	MSD
	7662262-1-BKS	BKS
	7662262-1-BLK	BLK
	7662262-1-BSD	BSD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063374
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	598921

Client Sample Id	Lab Sample Id	QC Types
Dup02-W-180912	598921-023	SMP
MW024A-W-180912	598921-021	SMP
MW041A-W-180912	598921-018	SMP
MW057SA-W-180912	598921-024	SMP
MW062A-W-180912	598921-019	SMP
MW063A-W-180912	598921-020	SMP
MW070A-W-180912	598921-022	SMP
	599041-001 S	MS
	599041-001 SD	MSD
	599042-001 S	MS
	599042-001 SD	MSD
	7662274-1-BKS	BKS
	7662274-1-BLK	BLK
	7662274-1-BSD	BSD



Analytical Log

Analytical Method: Dissolved Metals by SW6020A
 Project Name: Chevron N. Eunice
 Client Name: ARCADIS

Batch #: 3063648
 Project ID: B0048789.0004
 WO Number: 598921

Client Sample Id	Lab Sample Id	QC Types
DUP04-W-180912	598921-013	SMP
DUP05-W-180912	598921-014	SMP
MW021SA-W-180912	598921-008	SMP
MW024A-W-180912	598921-021	SMP
MW041A-W-180912	598921-018	SMP
MW048SA-W-180912	598921-017	SMP
MW049SA-W-180912	598921-016	SMP
MW050SA-W-180912	598921-009	SMP
MW051SA-W-180912	598921-010	SMP
MW052SA-W-180912	598921-015	SMP
MW054SA-W-180912	598921-012	SMP
MW062A-W-180912	598921-019	SMP
MW063A-W-180912	598921-020	SMP
MW072SA-W-180912	598921-007	SMP
MW073SA-W-180912	598921-006	SMP
MW079SA-W-180912	598921-011	SMP
	598788-014 S	MS
	598788-014 SD	MSD
	7662384-1-BKS	BKS
	7662384-1-BLK	BLK
	7662384-1-BSD	BSD



Analytical Log

Analytical Method: Dissolved Metals by SW6020A
Project Name: Chevron N. Eunice
Client Name: ARCADIS

Batch #: 3063675
Project ID: B0048789.0004
WO Number: 598921

Client Sample Id

Dup02-W-180912
MW057SA-W-180912
MW070A-W-180912

Lab Sample Id

598921-023
598921-024
598921-022
598921-022 S
598921-022 SD
598921-022 SDL
7662476-1-BKS
7662476-1-BLK
7662476-1-BSD

QC Types

SMP
SMP
SMP
MS
MSD
SDL
BKS
BLK
BSD



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Analyst: SCM

Date Prepared: 09/13/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063369

Sample: 7662262-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0858	25.0	27.0	108	25.0	27.0	108	0	90-110	20	

Analyst: SCM

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063374

Sample: 7662274-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0858	25.0	26.8	107	25.0	26.8	107	0	90-110	20	

Analyst: OJS

Date Prepared: 09/13/2018

Date Analyzed: 09/13/2018

Lab Batch ID: 3063018

Sample: 3063018-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.0400	0.0396	99	0.0400	0.0397	99	0	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Analyst: OJS

Date Prepared: 09/13/2018

Date Analyzed: 09/13/2018

Lab Batch ID: 3063019

Sample: 3063019-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0396	99	0.0400	0.0397	99	0	85-115	20	

Analyst: OJS

Date Prepared: 09/13/2018

Date Analyzed: 09/13/2018

Lab Batch ID: 3063022

Sample: 3063022-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0396	99	0.0400	0.0397	99	0	85-115	20	

Analyst: DEP

Date Prepared: 09/15/2018

Date Analyzed: 09/16/2018

Lab Batch ID: 3063327

Sample: 7662348-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.101	101	0.100	0.101	101	0	80-120	20	
Barium		<0.000484	0.100	0.100	100	0.100	0.101	101	1	80-120	20	
Chromium		<0.000525	0.100	0.0999	100	0.100	0.0980	98	2	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Analyst: DEP

Date Prepared: 09/17/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063648

Sample: 7662384-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.100	100	0.100	0.102	102	2	80-120	20	
Barium	<0.000484	0.100	0.100	100	0.100	0.0993	99	1	80-120	20	
Chromium	<0.000525	0.100	0.101	101	0.100	0.0997	100	1	80-120	20	

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Analyst: DEP

Lab Batch ID: 7662476-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.0983	98	0.100	0.0957	96	3	80-120	20	
Barium	<0.000484	0.100	0.0958	96	0.100	0.0976	98	2	80-120	20	
Chromium	<0.000525	0.100	0.0958	96	0.100	0.0977	98	2	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Analyst: OJS

Date Prepared: 09/12/2018

Date Analyzed: 09/12/2018

Lab Batch ID: 3063197

Sample: 3063197-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		<5.00	1000	985	99	1000	954	95	3	80-120	10	

Analyst: OJS

Date Prepared: 09/13/2018

Date Analyzed: 09/13/2018

Lab Batch ID: 3063326

Sample: 3063326-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		<5.00	1000	933	93	1000	939	94	1	80-120	10	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Lab Batch ID: 3063369

QC- Sample ID: 598918-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/14/2018

Date Prepared: 09/13/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	5.17	25.0	32.5	109	25.0	32.4	109	0	90-110	20	

Lab Batch ID: 3063369

QC- Sample ID: 598920-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/14/2018

Date Prepared: 09/13/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	35.6	25.0	60.9	101	25.0	60.8	101	0	90-110	20	

Lab Batch ID: 3063374

QC- Sample ID: 599041-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/15/2018

Date Prepared: 09/14/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	6.33	25.0	33.5	109	25.0	33.7	109	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+E)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Lab Batch ID: 3063374

QC- Sample ID: 599042-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/15/2018

Date Prepared: 09/14/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	3.70	25.0	31.0	109	25.0	31.0	109	0	90-110	20	

Lab Batch ID: 3063018

QC- Sample ID: 598921-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/13/2018

Date Prepared: 09/13/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.200	0.195	98	0.200	0.204	102	5	75-125	20	

Lab Batch ID: 3063019

QC- Sample ID: 598921-011 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/13/2018

Date Prepared: 09/13/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.200	0.204	102	0.200	0.209	105	2	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times |(C-F)/(C+F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Lab Batch ID: 3063022

QC- Sample ID: 598921-022 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/13/2018

Date Prepared: 09/13/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spiked Sample %R Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.196	98	0.200	0.196	98	0	75-125	20	

Lab Batch ID: 3063327

QC- Sample ID: 598697-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/16/2018

Date Prepared: 09/15/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spiked Sample %R Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.00241	0.100	0.106	104	0.100	0.107	105	1	75-125	20	
Barium		0.0518	0.100	0.160	108	0.100	0.159	107	1	75-125	20	
Chromium		0.00146	0.100	0.0989	97	0.100	0.0976	96	1	75-125	20	

Lab Batch ID: 3063648

QC- Sample ID: 598788-014 S

Batch #: 1 Matrix: Surface Water

Date Analyzed: 09/18/2018

Date Prepared: 09/17/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spiked Sample %R Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.000338	0.100	0.0987	98	0.100	0.0957	95	3	75-125	20	
Barium		0.0365	0.100	0.132	96	0.100	0.130	94	2	75-125	20	
Chromium		<0.000525	0.100	0.0971	97	0.100	0.0993	99	2	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+E)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 598921

Project ID: B0048789.0004

Lab Batch ID: 3063675

QC- Sample ID: 598921-022 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.0145	0.100	0.112	98	0.100	0.113	99	1	75-125	20	
Barium		0.0982	0.100	0.197	99	0.100	0.200	102	2	75-125	20	
Chromium		0.000838	0.100	0.0933	92	0.100	0.0975	97	4	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+E)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: Chevron N. Eunice

Work Order #: 598921

Lab Batch #: 3063197

Project ID: B0048789.0004

Date Analyzed: 09/12/2018 17:10

Date Prepared: 09/12/2018

Analyst: OJS

QC- Sample ID: 598697-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	2610	2530	3	10	

Lab Batch #: 3063197

Date Analyzed: 09/12/2018 17:10

Date Prepared: 09/12/2018

Analyst: OJS

QC- Sample ID: 598697-014 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	1730	1750	1	10	

Lab Batch #: 3063326

Date Analyzed: 09/13/2018 15:45

Date Prepared: 09/13/2018

Analyst: OJS

QC- Sample ID: 598921-007 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	1090	1130	4	10	

Lab Batch #: 3063326

Date Analyzed: 09/13/2018 15:45

Date Prepared: 09/13/2018

Analyst: OJS

QC- Sample ID: 598921-024 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	1450	1500	3	10	

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

BRL - Below Reporting Limit

Attachment A Laboratory Data Package Cover Page

Project Name: **Chevron N. Eunice**Laboratory Number: **598921**This Data package consists of : Laboratory Batch No(s) **3063648, 3063326, 3063675, 3063374, 3063**

This signature page, the laboratory review checklist, and the following reportable data:

- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- Items consistent with NELAC 5
 - dilution factors,
 - preparation methods,
 - cleanup methods, and
 - if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate Recovery data including:
- Calculated recovery (%R), and
 - The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- LCS spiking amounts,
 - Calculated %R for each analyte, and
 - The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- Samples associated with the MS/MSD clearly identified,
 - MS/MSD spiking amounts,
 - Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - Calculated %Rs and relative percent differences (RPDs) and
 - The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
- the amount of analyte measured in the duplicate,
 - the calculated RPD, and
 - the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies, observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC 25.6 and was last inspection by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Brooks
Name (Printed)


Signature

Project Manager
Official Title (printed)

19-SEP-18
Date

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES	LRC Date :		19-SEP-18				
Project Name:		Chevron N. Eunice	Laboratory Job Number :		598921				
Reviewer Name:		KEB	Batch Number(s) :		3063648, 3063326, 3063675, 3063374, 3063018, 3063197, 3063369, 3063022, 3063327, 3063019				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵		
R1	OI	Chain-of-Custody (COC)							
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X						
		Were all departures from standard conditions described in an exception report?			X				
R2	OI	Sample and Quality Control (QC) Identification							
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X						
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X						
R3	OI	Test Reports							
		Were all samples prepared and analyzed within holding times?	X						
		Other than those results <MQL, were all other raw values bracketed by calibration standards?	X						
		Were calculations checked by a peer or supervisor?	X						
		Were all analyte identifications checked by a peer or supervisor?	X						
		Were sample detection limits reported for all analytes not detected?	X						
		Were all results for soil and sediment samples reported on a dry weight basis?			X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X				
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X				
		If required for the project, were TICs reported?			X				
R4	O	Surrogate Recovery Data							
		Were surrogates added prior to extraction?			X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X				
R5	OI	Test Reports/Summary Forms for Blank Samples							
		Were appropriate type(s) of blanks analyzed?	X						
		Were blanks analyzed at the appropriate frequency ?	X						
		Were method blanks taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures ?	X						
		Were Blank Concentrations <MQL?	X						
R6	OI	Laboratory Control Samples (LCS):							
		Were all COCs included in the LCS?	X						
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X						
		Were LCSs analyzed at the required frequency?	X						
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X						
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X						
		Was the LCSD RPD within the QC limits?	X						
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data							
		Were the project/method specified analytes included in the MS and MSD?	X						
		Were MS/MSD analyzed at the appropriate frequency?	X						
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X						
		Were MS/MSD RPDs within the laboratory QC limits?	X						
R8	OI	Analytical Duplicate Data							
		Were appropriate analytical duplicates analyzed for each matrix?	X						
		Were analytical duplicates analyzed at the appropriate frequency?	X						
		Were RPDs or relative standard deviations within the laboratory QC limits?	X						
R9	OI	Method Quantitation Limits (MQLs)							
		Are the MQLs for each method analyte included in the laboratory data package?	X						
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X						
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X						
R10	OI	Other Problems/Anomalies							
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X						
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X						
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X						

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES	LRC Date :		19-SEP-18				
Project Name:		Chevron N. Eunice	Laboratory Job Number :		598921				
Reviewer Name:		KEB	Batch Number(s) :		3063648, 3063326, 3063675, 3063374, 3063018, 3063197, 3063369, 3063022, 3063327, 3063019				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵		
S1	OI	Initial Calibration (ICAL)							
		Were response factors and/or relative response factors for each analyte within QC limits?	X						
		Were percent RSDs or correlation coefficient criteria met?	X						
		Was the number of standards recommended in the method used for all analytes?	X						
		Were all points generated between the lowest and the highest standard used to calculate the curve?	X						
		Are ICAL data available for all instruments used?	X						
		Has the initial calibration curve been verified using an appropriate second source standard?	X						
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and continuing calibration blank (CCB)							
		Was the CCV analyzed at the method-required frequency?	X						
		Were percent differences for each analyte within the method-required QC limits?	X						
		Was the ICAL curve verified for each analyte?	X						
		Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	X						
S3	O	Mass Spectral Tuning							
		Was the appropriate compound for the method used for tuning?			X				
		Were ion abundance data within the method-required QC limits?			X				
S4	O	Internal Standard (IS)							
		Were IS area counts and retention times within the method-required QC limits?			X				
S5	OI	Raw Data (NELAC 5.5.10)							
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X						
		Were data associated with manual integrations flagged on the raw data?	X						
S6	O	Dual Column Confirmation							
		Did dual column confirmation results meet the method-required QC?			X				
S7	O	Tentatively Identified Compounds (TICs)							
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X				
S8	I	Interference Check Sample (ICS) Results							
		Were percent recoveries within method QC limits?	X						
S9	I	Serial Dilutions, Post Digestions Spikes, and Method of Standard Additions							
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X						
S10	OI	Method Detection Limit (MDL) Studies							
		Was a MDL study performed for each reported analyte?	X						
		Is the MDL either adjusted or supported by the analysis of DCSs?	X						
S11	OI	Proficiency Test Reports							
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X						
S12	OI	Standards Documentation							
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X						
S13	OI	Compound/Analyte Identification Procedures							
		Are the procedures for compound/analyte identification documented?	X						
S14	OI	Demonstration of Analyst Competency (DOC)							
		Was DOC conducted consistent with NELAC Chapter 5?	X						
		Is documentation of the analyst's competency up-to-date and on file?	X						
S15	OI	Verification/Validation Documentation for Methods (NELAC Chapter 5)							
		Are all methods used to generate the data documented, verified, and validated, where applicable?	X						
S16	OI	Laboratory Standard Operating Procedures (SOPs)							
		Are laboratory SOPs current and on file for each method performed?	X						

- Items identified by the letter "R" must be included in the laboratory data package submitted to the TCEQ-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Attachment A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: XENCO LABORATORIES	LRC Date: 19-SEP-18
Project Name: Chevron N. Eunice	Laboratory Job Number: 598921
Reviewer Name: KEB	Batch Number(s) : 3063648, 3063326, 3063675, 3063374, 3063018, 3063197, 3063369, 3063022, 3063327, 3063019
ER# 1	DESCRIPTION

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No is checked on the LRC).



ARCADIS, Midland, TX

Chevron N. Eunice

Analytical Method: **Chloride by EPA 300**

Matrix: **Water**

Prep Method: **E300P**

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chloride	0.0858	0.500	0.250	0.177	mg/L

Analytical Method: **Chromium, Hexavalent by SW 7196A**

Matrix: **Water**

Prep Method:

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chromium, Hexavalent	0.00273	0.0100	0.00800	0.00510	mg/L

Analytical Method: **Dissolved Metals by SW6020A**

Matrix: **Water**

Prep Method: **SW3010A**

Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Arsenic	0.000246	0.00400	0.00200	0.00294	mg/L
Barium	0.000484	0.00400	0.00400	0.00401	mg/L
Chromium	0.000525	0.00400	0.00200	0.00400	mg/L

[illegible]



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order # 598921

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City: Roseville State: CA Zip: 95678 Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Preservative Filtered (✓) ☒ E ☒ E # of Containers 1 1 3 4 Container Information							
Send Results to: Project Name/Location (City, State): Chevron N. Eunice Sample's Printed Name: <i>Dany S. Longwell</i> Project #: 80048789.0004 Sample's Signature: <i>Dany S. Longwell</i>		PARAMETER ANALYSIS & METHOD BTEX 8021B TPH GRO & DRO Dissolved As, Mn, Fe, Cr 6010B Dissolved Hex Chromium 7196 Chloride & TDS							
Sample ID	Collection Date	Time	Type (✓)	Comp	Grab	Matrix			
MW0525A-W-180912	9/12/12	1809	X			W			
MW0495A-W-180912	9/12/12	1320	X			W			
MW0485A-W-180912	9/12/12	1332	X			W			
MW0481A-W-180912	9/12/12	1347	X			W			
MW0482A-W-180912	9/12/12	1403	X			W			
MW0483A-W-180912	9/12/12	1424	X			W			
MW0484A-W-180912	9/12/12	1443	X			W			
MW0480A-W-180912	9/12/12	1502	X			W			
Special Instructions/Comments: MW0575A-W-180912 9/12/18 11:35 ☐ Special QA/QC Instructions (✓):									
Laboratory Information and Receipt Lab Name: Xenco Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact Sample Receipt: 880.030 Condition/Cooler Temp: 3.0 Shipping Tracking #: 5603003741-		Relinquished By Printed Name: <i>Dany S. Longwell</i> Signature: <i>Dany S. Longwell</i> Firm: Arcadis Date/Time: 9/12/18 1308		Received By Printed Name: <i>Jason Noh</i> Signature: <i>Jason Noh</i> Firm: Xenco Date/Time: 9/12/18 1900		Relinquished By Printed Name: <i>Jason Noh</i> Signature: <i>Jason Noh</i> Firm: Xenco Date/Time: 9/12/18 1900		Laboratory Received By Printed Name: _____ Signature: _____ Firm: _____ Date/Time: _____	

Distribution:

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK - Retained by Arcadis

Inter-Office Shipment

IOS Number **113951**

Date/Time: 09/13/18 08:02

Lab# From: **Midland**

Lab# To: **Houston**

Created by: Brianna Teel

Delivery Priority:

Air Bill No.: 773214945614

Please send report to: Kelsey Brooks

Address: 1211 W. Florida Ave, Midland TX 79701

E-Mail: kelsey.brooks@xenco.com

Page 1 of 2

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
598921-001	W	MW0715A-W-180912	09/12/18 09:11	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-002	W	MW0745A-W-180912	09/12/18 09:26	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-003	W	MW0565A-W-180912	09/12/18 09:42	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-004	W	MW0555A-W-180912	09/12/18 09:54	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-005	W	MW0665A-W-180912	09/12/18 10:05	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-006	W	MW0735A-W-180912	09/12/18 10:16	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-007	W	MW0725A-W-180912	09/12/18 11:35	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-008	W	MW0215A-W-180912	09/12/18 11:48	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-009	W	MW0505A-W-180912	09/12/18 11:59	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-010	W	MW0515A-W-180912	09/12/18 12:11	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-011	W	MW0795A-W-180912	09/12/18 12:25	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-012	W	MW0545A-W-180912	09/12/18 12:42	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-013	W	DUP04-W-180912	09/12/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-014	W	DUP05-W-180912	09/12/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-015	W	MW0525A-W-180912	09/12/18 13:09	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-016	W	MW0495A-W-180912	09/12/18 13:20	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-017	W	MW0485A-W-180912	09/12/18 13:32	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-018	W	MW041A-W-180912	09/12/18 13:44	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-019	W	MW062A-W-180912	09/12/18 14:03	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-020	W	MW063A-W-180912	09/12/18 14:14	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-021	W	MW024A-W-180912	09/12/18 14:43	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-022	W	MW070A-W-180912	09/12/18 15:02	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-023	W	Dup-02-W-180912	09/12/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	
598921-024	W	MW0575A-W-180912	09/12/18 11:35	SW6020_DIS	Dissolved Metals by SW6020A	09/18/18	03/11/19	KEB	AS BA CR	

Inter-Office Shipment

Page 2 of 2

IOS Number **113951**

Date/Time: 09/13/18 08:02

Created by: Brianna Teel

Lab# From: **Midland**

Delivery Priority:

Lab# To: **Houston**

Air Bill No.: 773214945614

Please send report to: Kelsey Brooks

Address: 1211 W. Florida Ave, Midland TX 79701

E-Mail: kelsey.brooks@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By:



Katie Lowe

Received By:



Rene Vandenberghe

Date Relinquished: 09/13/2018

Date Received: 09/14/2018 09:10

Cooler Temperature: 3.4



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 113951

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou-068

Sent By: Brianna Teel

Date Sent: 09/13/2018 08:02 AM

Received By: Rene Vandenberghe

Date Received: 09/14/2018 09:10 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

 Rene Vandenberghe

Date: 09/14/2018



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 09/12/2018 07:00:00 PM

Work Order #: 598921

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6* Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Metals to Stafford
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst: BT

PH Device/Lot#: 213315

Checklist completed by:

Katie Lowe

Date: 09/12/2018

Checklist reviewed by:

Kelsey Brooks

Date: 09/14/2018

Analytical Report 599078

for

ARCADIS

Project Manager: Brett Krehbiel

Chevron N. Eunice

B0048789.0004

20-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

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

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

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



Table of Contents

Cover Page	1
Cover Letter	3
Sample ID Cross Reference	4
LCASE_NARR_SUMMARY	5
Certificate of Analysis (Detailed Report)	6
Chronology of Holding Times	30
Explanation of Qualifiers (Flags)	34
Analytical Log	35
LCS / LCSD Recoveries	45
MS / MSD Recoveries	49
Method Duplicate	53
Laboratory Review Checklist	54
DCS_SUMMARY	58
Chain of Custody	59
IOS_COC_114005	61
IOS_Check_List_114005	63
Sample Receipt Conformance Report	64



20-SEP-18

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **599078**

Chevron N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 599078. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 599078 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Kelsey Brooks'.

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 599078

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW088M-W-180913	W	09-13-18 14:47		599078-001
MW013-W-180913	W	09-13-18 14:38		599078-002
MW040A-W-180913	W	09-13-18 14:29		599078-003
MW010-W-180913	W	09-13-18 14:21		599078-004
MW019A-W-180913	W	09-13-18 14:09		599078-005
MW018-W-180913	W	09-13-18 13:46		599078-006
MW020A-W-180913	W	09-13-18 14:00		599078-007
MW099-W-180913	W	09-13-18 13:21		599078-008
MW015A-W-180913	W	09-13-18 12:49		599078-009
MW026-W-180913	W	09-13-18 12:39		599078-010
MW027-W-180913	W	09-13-18 12:28		599078-011
MW032-W-180913	W	09-13-18 12:19		599078-012
MW068-W-180913	W	09-13-18 11:44		599078-013
MW061-W-180913	W	09-13-18 11:32		599078-014
MW095-W-180913	W	09-13-18 11:17		599078-015
MW030-W-180913	W	09-13-18 09:58		599078-016
MW031-W-180913	W	09-13-18 10:30		599078-017
MW060-W-180913	W	09-13-18 11:03		599078-018
MW059-W-180913	W	09-13-18 10:10		599078-019
MW069-W-180913	W	09-13-18 10:41		599078-020
MW023-W-180913	W	09-13-18 10:20		599078-021



CASE NARRATIVE SUMMARY



Client Name: *ARCADIS*

Project Name: *Chevron N. Eunice*

Project ID: *B0048789.0004*

Work Order Number: *599078*

Report Date: *20-SEP-18*

Date Received: *13-SEP-18*

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

Kelsey Brooks
Project Manager



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW088M-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-001

Date Collected: 09.13.18 14.47

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3200	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1760	25.0	4.29	mg/L	09.18.18 18:46		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0234	0.00400	0.000246	mg/L	09.18.18 16:12		1
Barium	7440-39-3	0.376	0.00400	0.000484	mg/L	09.18.18 16:12		1
Chromium	7440-47-3	0.157	0.00400	0.000525	mg/L	09.18.18 16:12		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW013-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-002

Date Collected: 09.13.18 14.38

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2810	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	692	10.0	1.72	mg/L	09.18.18 18:56		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00757	0.00400	0.000246	mg/L	09.18.18 16:15		1
Barium	7440-39-3	0.0208	0.00400	0.000484	mg/L	09.18.18 16:15		1
Chromium	7440-47-3	1.76	0.00400	0.000525	mg/L	09.18.18 16:15		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.84	0.0500	0.0136	mg/L	09.14.18 07:20		5



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW040A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-003

Date Collected: 09.13.18 14.29

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	497	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.6	2.50	0.429	mg/L	09.18.18 19:07		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.0200	0.00123	mg/L	09.19.18 17:20	J	5
Barium	7440-39-3	0.0371	0.0200	0.00242	mg/L	09.19.18 17:20		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:20	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW010-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-004

Date Collected: 09.13.18 14.21

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4990	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	2550	25.0	4.29	mg/L	09.18.18 19:17		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00939	0.0200	0.00123	mg/L	09.19.18 17:23	J	5
Barium	7440-39-3	0.0533	0.0200	0.00242	mg/L	09.19.18 17:23		5
Chromium	7440-47-3	0.0228	0.0200	0.00262	mg/L	09.19.18 17:23		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0120	0.0100	0.00273	mg/L	09.14.18 07:20		1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW019A-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-005

Date Collected: 09.13.18 14.09

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1170	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	291	5.00	0.858	mg/L	09.18.18 19:48		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0116	0.0200	0.00123	mg/L	09.19.18 17:26	J	5
Barium	7440-39-3	0.0453	0.0200	0.00242	mg/L	09.19.18 17:26		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:26	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW018-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-006

Date Collected: 09.13.18 13.46

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2210	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	528	10.0	1.72	mg/L	09.18.18 19:58		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00937	0.0200	0.00123	mg/L	09.19.18 17:29	J	5
Barium	7440-39-3	0.0562	0.0200	0.00242	mg/L	09.19.18 17:29		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:29	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW020A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-007

Date Collected: 09.13.18 14.00

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2370	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	961	10.0	1.72	mg/L	09.18.18 20:09		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0112	0.0200	0.00123	mg/L	09.19.18 17:32	J	5
Barium	7440-39-3	0.0305	0.0200	0.00242	mg/L	09.19.18 17:32		5
Chromium	7440-47-3	0.00675	0.0200	0.00262	mg/L	09.19.18 17:32	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW099-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-008

Date Collected: 09.13.18 13.21

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	496	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	64.6	2.50	0.429	mg/L	09.18.18 20:19		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00898	0.0200	0.00123	mg/L	09.19.18 17:36	J	5
Barium	7440-39-3	0.0956	0.0200	0.00242	mg/L	09.19.18 17:36		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:36	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW015A-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-009

Date Collected: 09.13.18 12.49

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	9850	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	5950	25.0	4.29	mg/L	09.18.18 20:29		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00882	0.0200	0.00123	mg/L	09.19.18 17:39	J	5
Barium	7440-39-3	0.202	0.0200	0.00242	mg/L	09.19.18 17:39		5
Chromium	7440-47-3	0.00534	0.0200	0.00262	mg/L	09.19.18 17:39	J	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW026-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-010

Date Collected: 09.13.18 12.39

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	860	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	129	2.50	0.429	mg/L	09.18.18 21:11		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00774	0.0200	0.00123	mg/L	09.19.18 17:42	J	5
Barium	7440-39-3	0.0532	0.0200	0.00242	mg/L	09.19.18 17:42		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:42	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW027-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-011

Date Collected: 09.13.18 12.28

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1600	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	355	5.00	0.858	mg/L	09.18.18 21:21		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00682	0.0200	0.00123	mg/L	09.19.18 17:45	J	5
Barium	7440-39-3	0.0393	0.0200	0.00242	mg/L	09.19.18 17:45		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:45	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW032-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-012

Date Collected: 09.13.18 12.19

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1190	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	309	5.00	0.858	mg/L	09.18.18 21:52		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00389	0.0200	0.00123	mg/L	09.19.18 17:58	J	5
Barium	7440-39-3	0.0728	0.0200	0.00242	mg/L	09.19.18 17:58		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 17:58	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW068-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-013

Date Collected: 09.13.18 11.44

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	18000	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	11700	50.0	8.58	mg/L	09.18.18 22:03		100

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0180	0.0200	0.00123	mg/L	09.19.18 18:01	J	5
Barium	7440-39-3	0.263	0.0200	0.00242	mg/L	09.19.18 18:01		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:01	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW061-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-014

Date Collected: 09.13.18 11.32

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3830	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1060	25.0	4.29	mg/L	09.18.18 22:13		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.0200	0.00123	mg/L	09.19.18 18:04	J	5
Barium	7440-39-3	0.0310	0.0200	0.00242	mg/L	09.19.18 18:04		5
Chromium	7440-47-3	1.56	0.0200	0.00262	mg/L	09.19.18 18:04		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.44	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW095-W-180913**

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-015

Date Collected: 09.13.18 11.17

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3650	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1380	25.0	4.29	mg/L	09.18.18 22:23		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00984	0.0200	0.00123	mg/L	09.19.18 18:08	J	5
Barium	7440-39-3	0.0415	0.0200	0.00242	mg/L	09.19.18 18:08		5
Chromium	7440-47-3	3.93	0.0200	0.00262	mg/L	09.19.18 18:08		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	3.62	0.200	0.0545	mg/L	09.14.18 08:15		20



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW030-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-016

Date Collected: 09.13.18 09.58

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	726	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	245	2.50	0.429	mg/L	09.18.18 22:34		5

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0189	0.0200	0.00123	mg/L	09.19.18 18:11	J	5
Barium	7440-39-3	0.0635	0.0200	0.00242	mg/L	09.19.18 18:11		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:11	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW031-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-017

Date Collected: 09.13.18 10.30

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	832	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	233	5.00	0.858	mg/L	09.18.18 22:44		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.102	0.0200	0.00123	mg/L	09.19.18 18:14		5
Barium	7440-39-3	0.106	0.0200	0.00242	mg/L	09.19.18 18:14		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:14	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW060-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-018

Date Collected: 09.13.18 11.03

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3470	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1560	25.0	4.29	mg/L	09.18.18 22:54		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00342	0.0200	0.00123	mg/L	09.19.18 18:17	J	5
Barium	7440-39-3	0.0535	0.0200	0.00242	mg/L	09.19.18 18:17		5
Chromium	7440-47-3	<0.00262	0.0200	0.00262	mg/L	09.19.18 18:17	U	5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW059-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-019

Date Collected: 09.13.18 10.10

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3070	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	904	25.0	4.29	mg/L	09.19.18 00:27		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0141	0.0200	0.00123	mg/L	09.19.18 18:20	J	5
Barium	7440-39-3	0.0330	0.0200	0.00242	mg/L	09.19.18 18:20		5
Chromium	7440-47-3	0.556	0.0200	0.00262	mg/L	09.19.18 18:20		5

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.469	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW069-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-020

Date Collected: 09.13.18 10.41

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1990	5.00	5.00	mg/L	09.15.18 12:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	804	10.0	1.72	mg/L	09.19.18 00:38		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0149	0.00400	0.000246	mg/L	09.18.18 18:26		1
Barium	7440-39-3	0.101	0.00400	0.000484	mg/L	09.18.18 18:26		1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 18:26	U	1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 09:00	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW023-W-180913

Matrix: Water

Sample Depth:

Lab Sample Id: 599078-021

Date Collected: 09.13.18 10.20

Date Received: 09.13.18 19.00

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	785	25.0	4.29	mg/L	09.19.18 00:48		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00933	0.00400	0.000246	mg/L	09.18.18 18:54		1
Barium	7440-39-3	0.0197	0.00400	0.000484	mg/L	09.18.18 18:54		1
Chromium	7440-47-3	1.72	0.00400	0.000525	mg/L	09.18.18 18:54		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.43	0.0500	0.0136	mg/L	09.14.18 08:15		5



Certificate of Analytical Results

599078



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **3063189-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063189-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063189

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 07:20	U	1

Sample Id: **3063195-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063195-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063195

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 08:15	U	1

Sample Id: **3063196-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063196-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 09:00	U	1

Sample Id: **3063565-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063565-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063565

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.15.18 12:00	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: 3063679-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3063679-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.17.18 16:00	U	1

Sample Id: 7662384-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662384-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063648

Date Prep: 09.17.18 10.20

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662384

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 13:48	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 13:48	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 13:48	U	1

Sample Id: 7662476-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662476-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063675

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662476

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 19:52	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 19:52	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 19:52	U	1



Certificate of Analytical Results

599078



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: 7662477-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662477-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 18:13	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 18:13	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 18:13	U	1

Sample Id: 7662536-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662536-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: CHE

Seq Number: 3063721

Date Prep: 09.18.18 13.15

Prep seq: 7662536

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.18.18 17:44	U	1
Nitrate as N	14797-55-8	<0.0157	0.100	0.0157	mg/L	09.18.18 17:44	U	1
Nitrite as N	14797-65-0	<0.0159	0.100	0.0159	mg/L	09.18.18 17:44	U	1

Sample Id: 7662538-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662538-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.18.18 23:25	U	1



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chloride by EPA 300

Client : ARCADIS

Work Order #: 599078

Project ID: B0048789.0004

Date Received: 09/13/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW088M-W-180913	599078-001	09/13/18				09/18/18	28	5	P
MW013-W-180913	599078-002	09/13/18				09/18/18	28	5	P
MW040A-W-180913	599078-003	09/13/18				09/18/18	28	5	P
MW010-W-180913	599078-004	09/13/18				09/18/18	28	5	P
MW019A-W-180913	599078-005	09/13/18				09/18/18	28	5	P
MW018-W-180913	599078-006	09/13/18				09/18/18	28	5	P
MW020A-W-180913	599078-007	09/13/18				09/18/18	28	5	P
MW099-W-180913	599078-008	09/13/18				09/18/18	28	5	P
MW015A-W-180913	599078-009	09/13/18				09/18/18	28	5	P
MW026-W-180913	599078-010	09/13/18				09/18/18	28	5	P
MW027-W-180913	599078-011	09/13/18				09/18/18	28	5	P
MW032-W-180913	599078-012	09/13/18				09/18/18	28	5	P
MW068-W-180913	599078-013	09/13/18				09/18/18	28	5	P
MW061-W-180913	599078-014	09/13/18				09/18/18	28	5	P
MW095-W-180913	599078-015	09/13/18				09/18/18	28	5	P
MW030-W-180913	599078-016	09/13/18				09/18/18	28	5	P
MW031-W-180913	599078-017	09/13/18				09/18/18	28	5	P
MW060-W-180913	599078-018	09/13/18				09/18/18	28	5	P
MW059-W-180913	599078-019	09/13/18				09/19/18	28	6	P
MW069-W-180913	599078-020	09/13/18				09/19/18	28	6	P
MW023-W-180913	599078-021	09/13/18				09/19/18	28	6	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : TDS by SM2540C

Client : ARCADIS

Work Order #: 599078

Project ID: B0048789.0004

Date Received: 09/13/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW088M-W-180913	599078-001	09/13/18				09/15/18	7	2	P
MW013-W-180913	599078-002	09/13/18				09/15/18	7	2	P
MW040A-W-180913	599078-003	09/13/18				09/15/18	7	2	P
MW010-W-180913	599078-004	09/13/18				09/15/18	7	2	P
MW019A-W-180913	599078-005	09/13/18				09/15/18	7	2	P
MW018-W-180913	599078-006	09/13/18				09/15/18	7	2	P
MW020A-W-180913	599078-007	09/13/18				09/15/18	7	2	P
MW099-W-180913	599078-008	09/13/18				09/15/18	7	2	P
MW015A-W-180913	599078-009	09/13/18				09/15/18	7	2	P
MW026-W-180913	599078-010	09/13/18				09/15/18	7	2	P
MW027-W-180913	599078-011	09/13/18				09/15/18	7	2	P
MW032-W-180913	599078-012	09/13/18				09/15/18	7	2	P
MW068-W-180913	599078-013	09/13/18				09/15/18	7	2	P
MW061-W-180913	599078-014	09/13/18				09/15/18	7	2	P
MW095-W-180913	599078-015	09/13/18				09/15/18	7	2	P
MW030-W-180913	599078-016	09/13/18				09/15/18	7	2	P
MW031-W-180913	599078-017	09/13/18				09/15/18	7	2	P
MW060-W-180913	599078-018	09/13/18				09/15/18	7	2	P
MW059-W-180913	599078-019	09/13/18				09/15/18	7	2	P
MW069-W-180913	599078-020	09/13/18				09/15/18	7	2	P
MW023-W-180913	599078-021	09/13/18				09/17/18	7	4	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Dissolved Metals by SW6020A

Client : ARCADIS

Work Order #: 599078

Project ID: B0048789.0004

Date Received: 09/13/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW088M-W-180913	599078-001	09/13/18	09/17/18	180	4	09/18/18	180	1	P
MW013-W-180913	599078-002	09/13/18	09/17/18	180	4	09/18/18	180	1	P
MW040A-W-180913	599078-003	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW010-W-180913	599078-004	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW019A-W-180913	599078-005	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW018-W-180913	599078-006	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW020A-W-180913	599078-007	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW099-W-180913	599078-008	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW015A-W-180913	599078-009	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW026-W-180913	599078-010	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW027-W-180913	599078-011	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW032-W-180913	599078-012	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW068-W-180913	599078-013	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW061-W-180913	599078-014	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW095-W-180913	599078-015	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW030-W-180913	599078-016	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW031-W-180913	599078-017	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW060-W-180913	599078-018	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW059-W-180913	599078-019	09/13/18	09/18/18	180	5	09/19/18	180	1	P
MW069-W-180913	599078-020	09/13/18	09/18/18	180	5	09/18/18	180	0	P
MW023-W-180913	599078-021	09/13/18	09/18/18	180	5	09/18/18	180	0	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chromium, Hexavalent by SW 7196A

Client : ARCADIS

Work Order #: 599078

Project ID: B0048789.0004

Date Received: 09/13/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Hour)	Time Held Extracted (Hour)	Date Analyzed	Max Holding Time Analyzed (Hour)	Time Held Analyzed (Hour)	Q
MW088M-W-180913	599078-001	09/13/18				09/14/18	24	17	P
MW013-W-180913	599078-002	09/13/18				09/14/18	24	17	P
MW040A-W-180913	599078-003	09/13/18				09/14/18	24	17	P
MW010-W-180913	599078-004	09/13/18				09/14/18	24	17	P
MW019A-W-180913	599078-005	09/13/18				09/14/18	24	17	P
MW018-W-180913	599078-006	09/13/18				09/14/18	24	18	P
MW020A-W-180913	599078-007	09/13/18				09/14/18	24	17	P
MW099-W-180913	599078-008	09/13/18				09/14/18	24	18	P
MW015A-W-180913	599078-009	09/13/18				09/14/18	24	19	P
MW026-W-180913	599078-010	09/13/18				09/14/18	24	19	P
MW027-W-180913	599078-011	09/13/18				09/14/18	24	20	P
MW032-W-180913	599078-012	09/13/18				09/14/18	24	20	P
MW068-W-180913	599078-013	09/13/18				09/14/18	24	21	P
MW061-W-180913	599078-014	09/13/18				09/14/18	24	21	P
MW095-W-180913	599078-015	09/13/18				09/14/18	24	21	P
MW030-W-180913	599078-016	09/13/18				09/14/18	24	22	P
MW031-W-180913	599078-017	09/13/18				09/14/18	24	22	P
MW060-W-180913	599078-018	09/13/18				09/14/18	24	21	P
MW059-W-180913	599078-019	09/13/18				09/14/18	24	22	P
MW069-W-180913	599078-020	09/13/18				09/14/18	24	22	P
MW023-W-180913	599078-021	09/13/18				09/14/18	24	22	P

F = These samples were analyzed outside the recommended holding time.

P = Samples analyzed within the recommended holding time.



Flagging Criteria



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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063189

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599078

Client Sample Id**Lab Sample Id****QC Types**

MW010-W-180913

599078-004

SMP

MW013-W-180913

599078-002

SMP

MW015A-W-180913

599078-009

SMP

MW018-W-180913

599078-006

SMP

MW019A-W-180913

599078-005

SMP

MW020A-W-180913

599078-007

SMP

MW026-W-180913

599078-010

SMP

MW040A-W-180913

599078-003

SMP

MW088M-W-180913

599078-001

SMP

MW099-W-180913

599078-008

SMP

3063189-1-BKS

BKS

3063189-1-BLK

BLK

3063189-1-BSD

BSD

599078-003 S

MS

599078-003 SD

MSD



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063195

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599078

Client Sample Id

MW023-W-180913

MW027-W-180913

MW030-W-180913

MW031-W-180913

MW032-W-180913

MW059-W-180913

MW060-W-180913

MW061-W-180913

MW068-W-180913

MW095-W-180913

Lab Sample Id

599078-021

599078-011

599078-016

599078-017

599078-012

599078-019

599078-018

599078-014

599078-013

599078-015

3063195-1-BKS

3063195-1-BLK

3063195-1-BSD

599078-016 S

599078-016 SD

QC Types

SMP

SMP

SMP

SMP

SMP

SMP

SMP

SMP

SMP

SMP

BKS

BLK

BSD

MS

MSD



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063196

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599078

Client Sample Id

MW069-W-180913

Lab Sample Id

599078-020

QC Types

SMP

3063196-1-BKS

BKS

3063196-1-BLK

BLK

3063196-1-BSD

BSD

599078-020 S

MS

599078-020 SD

MSD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063565
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599078

Client Sample Id	Lab Sample Id	QC Types
MW010-W-180913	599078-004	SMP
MW013-W-180913	599078-002	SMP
MW015A-W-180913	599078-009	SMP
MW018-W-180913	599078-006	SMP
MW019A-W-180913	599078-005	SMP
MW020A-W-180913	599078-007	SMP
MW026-W-180913	599078-010	SMP
MW027-W-180913	599078-011	SMP
MW030-W-180913	599078-016	SMP
MW031-W-180913	599078-017	SMP
MW032-W-180913	599078-012	SMP
MW040A-W-180913	599078-003	SMP
MW059-W-180913	599078-019	SMP
MW060-W-180913	599078-018	SMP
MW061-W-180913	599078-014	SMP
MW068-W-180913	599078-013	SMP
MW069-W-180913	599078-020	SMP
MW088M-W-180913	599078-001	SMP
MW095-W-180913	599078-015	SMP
MW099-W-180913	599078-008	SMP
	3063565-1-BKS	BKS
	3063565-1-BLK	BLK
	3063565-1-BSD	BSD
	599078-001 D	MD
	599078-020 D	MD



Analytical Log

Analytical Method: Dissolved Metals by SW6020A
Project Name: Chevron N. Eunice
Client Name: ARCADIS

Batch #: 3063644
Project ID: B0048789.0004
WO Number: 599078

Client Sample IdMW023-W-180913MW069-W-180913 **Lab Sample Id**599078-021599078-020599078-020 S599078-020 SD599078-020 SDL7662477-1-BKS7662477-1-BLK7662477-1-BSD**QC Types**SMPSMPMSMSDSDLBKSBLKBSD

Batch #: 3063648

Project ID: B0048789.0004

WO Number: 599078

QC Types

SMP

SMP

MS

MSD

BKS

BLK

BSD



Analytical Log

Analytical Method: Dissolved Metals by SW6020A
 Project Name: Chevron N. Eunice
 Client Name: ARCADIS

Batch #: 3063675
 Project ID: B0048789.0004
 WO Number: 599078

Client Sample Id	Lab Sample Id	QC Types
MW010-W-180913	599078-004	SMP
MW015A-W-180913	599078-009	SMP
MW018-W-180913	599078-006	SMP
MW019A-W-180913	599078-005	SMP
MW020A-W-180913	599078-007	SMP
MW026-W-180913	599078-010	SMP
MW027-W-180913	599078-011	SMP
MW030-W-180913	599078-016	SMP
MW031-W-180913	599078-017	SMP
MW032-W-180913	599078-012	SMP
MW040A-W-180913	599078-003	SMP
MW059-W-180913	599078-019	SMP
MW060-W-180913	599078-018	SMP
MW061-W-180913	599078-014	SMP
MW068-W-180913	599078-013	SMP
MW095-W-180913	599078-015	SMP
MW099-W-180913	599078-008	SMP
	598921-022 S	MS
	598921-022 SD	MSD
	7662476-1-BKS	BKS
	7662476-1-BLK	BLK
	7662476-1-BSD	BSD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063679
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599078

Client Sample Id	Lab Sample Id	QC Types
MW023-W-180913	599078-021	SMP
	3063679-1-BKS	BKS
	3063679-1-BLK	BLK
	3063679-1-BSD	BSD
	599078-021 D	MD
	599188-001 D	MD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063721
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599078

Client Sample Id	Lab Sample Id	QC Types
MW010-W-180913	599078-004	SMP
MW013-W-180913	599078-002	SMP
MW015A-W-180913	599078-009	SMP
MW018-W-180913	599078-006	SMP
MW019A-W-180913	599078-005	SMP
MW020A-W-180913	599078-007	SMP
MW026-W-180913	599078-010	SMP
MW027-W-180913	599078-011	SMP
MW030-W-180913	599078-016	SMP
MW031-W-180913	599078-017	SMP
MW032-W-180913	599078-012	SMP
MW040A-W-180913	599078-003	SMP
MW060-W-180913	599078-018	SMP
MW061-W-180913	599078-014	SMP
MW068-W-180913	599078-013	SMP
MW088M-W-180913	599078-001	SMP
MW095-W-180913	599078-015	SMP
MW099-W-180913	599078-008	SMP
	599335-001 S	MS
	599335-001 SD	MSD
	599336-001 S	MS
	599336-001 SD	MSD
	7662536-1-BKS	BKS
	7662536-1-BLK	BLK
	7662536-1-BSD	BSD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063723
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599078

Client Sample Id	Lab Sample Id	QC Types
MW023-W-180913	599078-021	SMP
MW059-W-180913	599078-019	SMP
MW069-W-180913	599078-020	SMP
	599196-003 S	MS
	599196-003 SD	MSD
	599337-001 S	MS
	599337-001 SD	MSD
	7662538-1-BKS	BKS
	7662538-1-BLK	BLK
	7662538-1-BSD	BSD



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Analyst: SCM

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063721

Sample: 7662536-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.0858	25.0	26.1	104	25.0	26.1	104	0	90-110	20	

Analyst: SCM

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063723

Sample: 7662538-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.0858	25.0	26.2	105	25.0	26.1	104	0	90-110	20	

Analyst: OJS

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063189

Sample: 3063189-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chromium, Hexavalent by SW 7196A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.00273	0.0400	0.0399	100	0.0400	0.0402	101	1	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Analyst: OJS

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063195

Sample: 3063195-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0399	100	0.0400	0.0402	101	1	85-115	20	

Analyst: OJS

Date Analyzed: 09/14/2018

Lab Batch ID: 3063196

Sample: 3063196-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.0400	0.0399	100	0.0400	0.0402	101	1	85-115	20	

Analyst: DEP

Date Analyzed: 09/18/2018

Lab Batch ID: 3063648

Sample: 7662384-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.000246	0.100	0.100	100	0.100	0.102	102	2	80-120	20	
Barium		<0.000484	0.100	0.100	100	0.100	0.0993	99	1	80-120	20	
Chromium		<0.000525	0.100	0.101	101	0.100	0.0997	100	1	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Analyst: DEP

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063675

Sample: 7662476-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.0983	98	0.100	0.0957	96	3	80-120	20	
Barium	<0.000484	0.100	0.0958	96	0.100	0.0976	98	2	80-120	20	
Chromium	<0.000525	0.100	0.0958	96	0.100	0.0977	98	2	80-120	20	

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Analyst: DEP

Lab Batch ID: 3063644

Sample: 7662477-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.101	101	0.100	0.100	100	1	80-120	20	
Barium	<0.000484	0.100	0.0992	99	0.100	0.0977	98	2	80-120	20	
Chromium	<0.000525	0.100	0.0991	99	0.100	0.0983	98	1	80-120	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Analyst: OJS

Date Prepared: 09/15/2018

Date Analyzed: 09/15/2018

Lab Batch ID: 3063565

Sample: 3063565-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		<5.00	1000	973	97	1000	988	99	2	80-120	10	

Date Prepared: 09/17/2018

Date Analyzed: 09/17/2018

Analyst: OJS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Total Dissolved Solids		<5.00	1000	962	96	1000	979	98	2	80-120	10	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Lab Batch ID: 3063721

QC- Sample ID: 599335-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	4.78	25.0	30.5	103	25.0	30.5	103	0	90-110	20	

Lab Batch ID: 3063721

QC- Sample ID: 599336-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	25.6	25.0	52.9	109	25.0	55.4	119	5	90-110	20	X

Lab Batch ID: 3063723

QC- Sample ID: 599196-003 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/19/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	38.6	25.0	64.5	104	25.0	64.5	104	0	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Lab Batch ID: 3063723

QC- Sample ID: 599337-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/19/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	27.6	25.0	54.5	108	25.0	54.6	108	0	90-110	20	

Lab Batch ID: 3063189

QC- Sample ID: 599078-003 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chromium, Hexavalent	<0.00273	0.200	0.202	101	0.200	0.202	101	0	75-125	20	

Lab Batch ID: 3063195

QC- Sample ID: 599078-016 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chromium, Hexavalent	<0.00273	0.200	0.186	93	0.200	0.192	96	3	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Lab Batch ID: 3063196

QC- Sample ID: 599078-020 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chromium, Hexavalent		<0.00273	0.200	0.203	102	0.200	0.208	104	2	75-125	20	

Lab Batch ID: 3063644

QC- Sample ID: 599078-020 S

Batch #: 1 **Matrix:** Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.0149	0.100	0.115	100	0.100	0.115	100	0	75-125	20	
Barium		0.101	0.100	0.196	95	0.100	0.199	98	2	75-125	20	
Chromium		<0.000525	0.100	0.0997	100	0.100	0.0996	100	0	75-125	20	

Lab Batch ID: 3063648

QC- Sample ID: 598788-014 S

Batch #: 1 **Matrix:** Surface Water

Date Analyzed: 09/18/2018

Date Prepared: 09/17/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.000338	0.100	0.0987	98	0.100	0.0957	95	3	75-125	20	
Barium		0.0365	0.100	0.132	96	0.100	0.130	94	2	75-125	20	
Chromium		<0.000525	0.100	0.0971	97	0.100	0.0993	99	2	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+E)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599078

Project ID: B0048789.0004

Lab Batch ID: 3063675

QC- Sample ID: 598921-022 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		0.0145	0.100	0.112	98	0.100	0.113	99	1	75-125	20	
Barium		0.0982	0.100	0.197	99	0.100	0.200	102	2	75-125	20	
Chromium		0.000838	0.100	0.0933	92	0.100	0.0975	97	4	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: Chevron N. Eunice

Work Order #: 599078

Lab Batch #: 3063565

Project ID: B0048789.0004

Date Analyzed: 09/15/2018 12:00

Date Prepared: 09/15/2018

Analyst: OJS

QC- Sample ID: 599078-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3200	3280	2	10	

Lab Batch #: 3063565

Date Analyzed: 09/15/2018 12:00

Date Prepared: 09/15/2018

Analyst: OJS

QC- Sample ID: 599078-020 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	1990	2000	1	10	

Lab Batch #: 3063679

Date Analyzed: 09/17/2018 16:00

Date Prepared: 09/17/2018

Analyst: OJS

QC- Sample ID: 599078-021 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3160	3240	3	10	

Lab Batch #: 3063679

Date Analyzed: 09/17/2018 16:00

Date Prepared: 09/17/2018

Analyst: OJS

QC- Sample ID: 599188-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3040	3080	1	10	

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

BRL - Below Reporting Limit

Attachment A Laboratory Data Package Cover Page

Project Name: **Chevron N. Eunice**Laboratory Number: **599078**This Data package consists of : Laboratory Batch No(s) **3063648, 3063721, 3063675, 3063189, 3063**

This signature page, the laboratory review checklist, and the following reportable data:

- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- a) Items consistent with NELAC 5
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs) and
 - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
- a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies, observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC 25.6 and was last inspection by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Brooks
Name (Printed)


Signature

Project Manager
Official Title (printed)

20-SEP-18
Date

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES	LRC Date :		20-SEP-18				
Project Name:		Chevron N. Eunice	Laboratory Job Number :		599078				
Reviewer Name:		KEB	Batch Number(s) :		3063648, 3063721, 3063675, 3063189, 3063679, 3063195, 3063565, 3063196, 3063723, 3063644				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵		
R1	OI	Chain-of-Custody (COC)							
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X						
		Were all departures from standard conditions described in an exception report?			X				
R2	OI	Sample and Quality Control (QC) Identification							
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X						
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X						
R3	OI	Test Reports							
		Were all samples prepared and analyzed within holding times?	X						
		Other than those results <MQL, were all other raw values bracketed by calibration standards?	X						
		Were calculations checked by a peer or supervisor?	X						
		Were all analyte identifications checked by a peer or supervisor?	X						
		Were sample detection limits reported for all analytes not detected?	X						
		Were all results for soil and sediment samples reported on a dry weight basis?			X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X				
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X				
		If required for the project, were TICs reported?			X				
R4	O	Surrogate Recovery Data							
		Were surrogates added prior to extraction?			X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X				
R5	OI	Test Reports/Summary Forms for Blank Samples							
		Were appropriate type(s) of blanks analyzed?	X						
		Were blanks analyzed at the appropriate frequency ?	X						
		Were method blanks taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures ?	X						
		Were Blank Concentrations <MQL?	X						
R6	OI	Laboratory Control Samples (LCS):							
		Were all COCs included in the LCS?	X						
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X						
		Were LCSs analyzed at the required frequency?	X						
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X						
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X						
		Was the LCSD RPD within the QC limits?	X						
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data							
		Were the project/method specified analytes included in the MS and MSD?	X						
		Were MS/MSD analyzed at the appropriate frequency?	X						
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X						
		Were MS/MSD RPDs within the laboratory QC limits?	X						
R8	OI	Analytical Duplicate Data							
		Were appropriate analytical duplicates analyzed for each matrix?	X						
		Were analytical duplicates analyzed at the appropriate frequency?	X						
		Were RPDs or relative standard deviations within the laboratory QC limits?	X						
R9	OI	Method Quantitation Limits (MQLs)							
		Are the MQLs for each method analyte included in the laboratory data package?	X						
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X						
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X						
R10	OI	Other Problems/Anomalies							
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X						
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X						
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X						

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES		LRC Date :		20-SEP-18	
Project Name:		Chevron N. Eunice		Laboratory Job Number :		599078	
Reviewer Name:		KEB		Batch Number(s) :		3063648, 3063721, 3063675, 3063189, 3063679, 3063195, 3063565, 3063196, 3063723, 3063644	

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial Calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and the highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	X				
S3	O	Mass Spectral Tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal Standard (IS)					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	Raw Data (NELAC 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual Column Confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively Identified Compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) Results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial Dilutions, Post Digestions Spikes, and Method of Standard Additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method Detection Limit (MDL) Studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency Test Reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/Analyte Identification Procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation for Methods (NELAC Chapter 5)					
		Are all methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed?	X				

- Items identified by the letter "R" must be included in the laboratory data package submitted to the TCEQ-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Attachment A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: XENCO LABORATORIES	LRC Date: 20-SEP-18
Project Name: Chevron N. Eunice	Laboratory Job Number: 599078
Reviewer Name: KEB	Batch Number(s) : 3063648, 3063721, 3063675, 3063189, 3063679, 3063195, 3063565, 3063196, 3063723, 3063644
ER# 1	DESCRIPTION

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No is checked on the LRC).



ARCADIS, Midland, TX

Chevron N. Eunice

Analytical Method: **Chloride by EPA 300**

Matrix: **Water**

Prep Method: **E300P**

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chloride	0.0858	0.500	0.250	0.177	mg/L

Analytical Method: **Chromium, Hexavalent by SW 7196A**

Matrix: **Water**

Prep Method:

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chromium, Hexavalent	0.00273	0.0100	0.00800	0.00510	mg/L

Analytical Method: **Dissolved Metals by SW6020A**

Matrix: **Water**

Prep Method: **SW3010A**

Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Arsenic	0.000246	0.00400	0.00200	0.00294	mg/L
Barium	0.000484	0.00400	0.00400	0.00401	mg/L
Chromium	0.000525	0.00400	0.00200	0.00400	mg/L



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2 Lab Work Order # 5997

Contact & Company Name:		Telephone:		
Brett Krehbiel Arcadis		916-786-0320		
Address:		Fax:		
101 Creekside Ridge Court, Suite 200		916-786-0366		
City		State		
Roseville		CA		
Zip		E-mail Address:		
95678		brett.krehbiel@arcadis.com		
Project #:		Project #:		
Chevron N. Eunice		B0048789.0004		
Sample's Printed Name:		Sample's Signature:		
NYS Longwell				
Sample ID		Collection		
		Date	Time	
		Type (✓)	Matrix	
		Comp	Grab	
MW0088-M-W-180913	9/13/13	1447	X	W
MW0013-W-180913	9/13/13	1434	X	W
MW0082A-W-180913	9/13/13	1429	X	W
MW0010-W-180913	9/13/13	1421	X	W
MW0019A-W-180913	9/13/13	1409	V	W
MW0018-W-180913	9/13/13	1346	X	W
MW0020A-W-180913	9/13/13	1400	X	W
MW0029-W-180913	9/13/13	1321	X	W
MW005A-W-180913	9/13/13	1249	X	W
MW0026-W-180913	9/13/13	1739	X	W
MW0027-W-180913	9/13/13	1729	X	W
MW0037-W-180913	9/13/13	1719	X	W
MW0069-W-180913	9/13/13	1444	X	W
MW0061-W-180913	9/13/13	1132	X	W

Send Results to:

Contact & Company Name: Brett Krehbiel Arcadis

Address: 101 Creekside Ridge Court, Suite 200

City: Roseville **State:** CA **Zip:** 95678

E-mail Address: brett.krehbiel@arcadis.com

Project #: B0048789.0004

Sample's Printed Name: NYS Longwell

Sample's Signature: 

Preservative:

Filtered (✓):

of Containers:

Container Information:

TPH GRO & DRO

BTEX 8021B

8015B

Disolved As, Mn, Fe, Cr 6010B

Disolved Hex Chromium 7196

Chloride & TDS

Matrix Key:

SE - Sediment

SO - Soil

W - Water

T - Tissue

SL - Sludge

A - Air

NL - NAPL/Oil

SW - Sample Wipe

Other:

Keys

Container Information Key:

1. 40 ml Vial

2. 1 L Amber

3. 250 ml Plastic

4. 500 ml Plastic

5. Encore

6. 2 oz Glass

7. 4 oz Glass

8. 8 oz Glass

9. Other:

10. Other:

Preservation Key:

A. H₂SO₄

B. HCl

C. HNO₃

D. NaOH

E. None

F. Other:

G. Other:

H. Other:

PARAMETER ANALYSIS & METHOD

REMARKS

Laboratory Information and Receipt			Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name: Xenco	Cooler Custody Seal (✓) ☒ Intact ☐ Not Intact	Printed Name: <i>Bryan Shamsuwell</i>	Printed Name: <i>Dustin Boer</i>	Printed Name: <i>Christina Teel</i>	Printed Name: <i>Christina Teel</i>					
cooler packed with ice (✓)		Signature: <i>Bryan Shamsuwell</i>	Signature: <i>Dustin Boer</i>	Signature: <i>Christina Teel</i>	Signature: <i>Christina Teel</i>					
Specify Turnaround Requirements: <i>Standard 30M</i>	Sample Receipt: <i>1500-03-0</i>		Firm: Arcadis	Firm: Xenco	Firm: Xenco					
Shipping Tracking #:	Condition/Cooler Temp.: <i>5/06/16 57</i>	Date/Time: <i>5/06/16 57</i>	Date/Time: <i>05/13/18 16:57</i>	Date/Time: <i>05/13/18 19:00</i>	Date/Time: <i>05/13/18 19:00</i>					

Distribution:

WHITE — laboratory returns with results

VEILION 1 of 2

100



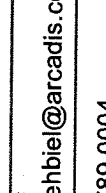
ARCADIS

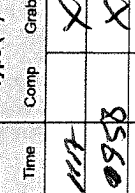
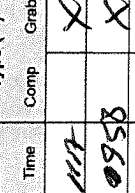
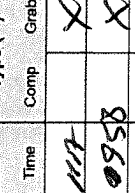
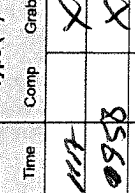
CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

ID#:

Page 7 of 7

Lab Work Order # 299078

Contact & Company Name: Brett Krehbiel Arcadis		Telephone: 916-786-0320		Preservatives ☐ Filtered (✓)		B		C		E	
Address: 101 Creekside Ridge Court, Suite 200		Fax: 916-786-0366		# of Containers 1		1		3		4	
City Roseville		State CA		Zip 95678		Container Information 1		3		4	
E-mail Address: brett.krehbiel@arcadis.com		Project #: B0048789.0004		Sample's Signature: 		TPH GRO & DRO 8015B		Dissolved As. Mn. Fe, Cr 6010B		Chloride & TDS	
Project Name/Location (City, State): Chevron N. Eunice		Sample ID		Collection		Date		Type (✓)		Matrix	
		M20095-W-180913		8/13/18		11:17		X		W	
		M20030-W-180913		8/13/18		09:58		X		W	
		M20031-W-180913		8/13/18		10:30		X		W	
		M20060-W-180913		8/13/18		11:03		X		W	
		M20059-W-180913		8/13/18		10:10		X		W	
		M20059-W-180913		8/13/18		10:41		X		W	
		M20023-W-180913		8/13/18		10:20		X		W	
Special Instructions/Comments: 											
Special QA/QC Instructions (✓):											

Lab Name: Xenco		Laboratory Information and Receipt Coaster Custody Seal (✓) ☒ Intact ☐ Not Intact		Relinquished By Printed Name: Terry S. Shaw Signature: 		Received By Printed Name: Winston N. Shaw Signature: 		Relinquished By Printed Name: Winston N. Shaw Signature: 		Laboratory Received By Printed Name: Winston N. Shaw Signature: 	
Shipping Tracking #: Standard Mail		Sample Receipt: Condition/Coaster Temp: 20.00 3.0		Firm: Arcadis Date/Time: 8/13/18 16:57		Firm/Coaster: Xenco Date/Time: 8/13/18 16:57		Firm/Coaster: Xenco Date/Time: 8/13/18 19:00		Firm/Coaster: Xenco Date/Time: 8/13/18 19:00	

Inter-Office Shipment

IOS Number **114005**

Date/Time: 09/14/18 08:29

Lab# From: **Midland**

Lab# To: **Houston**

Created by: Brianna Teel

Delivery Priority:

Air Bill No.: 773225421654

Please send report to: Kelsey Brooks

Address: 1211 W. Florida Ave, Midland TX 79701

E-Mail: kelsey.brooks@xenco.com

Page 1 of 2

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
599078-001	W	MW088M-W-180913	09/13/18 14:47	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-002	W	MW013-W-180913	09/13/18 14:38	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-003	W	MW040A-W-180913	09/13/18 14:29	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-004	W	MW010-W-180913	09/13/18 14:21	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-005	W	MW019A-W-180913	09/13/18 14:09	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-006	W	MW018-W-180913	09/13/18 13:46	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-007	W	MW020A-W-180913	09/13/18 14:00	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-008	W	MW099-W-180913	09/13/18 13:21	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-009	W	MW015A-W-180913	09/13/18 12:49	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-010	W	MW026-W-180913	09/13/18 12:39	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-011	W	MW027-W-180913	09/13/18 12:28	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-012	W	MW032-W-180913	09/13/18 12:19	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-013	W	MW068-W-180913	09/13/18 11:44	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-014	W	MW061-W-180913	09/13/18 11:32	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-015	W	MW095-W-180913	09/13/18 11:17	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-016	W	MW030-W-180913	09/13/18 09:58	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-017	W	MW031-W-180913	09/13/18 10:30	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-018	W	MW060-W-180913	09/13/18 11:03	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-019	W	MW059-W-180913	09/13/18 10:10	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-020	W	MW069-W-180913	09/13/18 10:41	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	
599078-021	W	MW023-W-180913	09/13/18 10:20	SW6020_DIS	Dissolved Metals by SW6020A	09/19/18	03/12/19	KEB	AS BA CR	

Inter-Office Shipment

Page 2 of 2

IOS Number **114005**

Date/Time: 09/14/18 08:29

Created by: Brianna Teel

Lab# From: **Midland**

Delivery Priority:

Lab# To: **Houston**

Air Bill No.: 773225421654

Please send report to: Kelsey Brooks

Address: 1211 W. Florida Ave, Midland TX 79701

E-Mail: kelsey.brooks@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By:

Brianna Teel

Brianna Teel

Received By:

R. C. Vandenberghe

Rene Vandenberghe

Date Relinquished: 09/14/2018

Date Received: 09/15/2018 09:30

Cooler Temperature: 3.2



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 114005

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou-068

Sent By: Brianna Teel

Date Sent: 09/14/2018 08:29 AM

Received By: Rene Vandenberghe

Date Received: 09/15/2018 09:30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

 Rene Vandenberghe

Date: 09/15/2018



Client: ARCADIS

Date/ Time Received: 09/13/2018 07:00:00 PM

Work Order #: 599078

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Metals to Stafford
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst: Bt

PH Device/Lot#: 213315

Checklist completed by:

Brianna Teel

Date: 09/14/2018

Checklist reviewed by:

Kelsey Brooks

Date: 09/14/2018

Analytical Report 599188

for

ARCADIS

Project Manager: Brett Krehbiel

Chevron N. Eunice

B0048789.0004

21-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

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

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

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



Table of Contents

Cover Page	1
Cover Letter	3
Sample ID Cross Reference	4
LCASE_NARR_SUMMARY	5
Certificate of Analysis (Detailed Report)	6
Chronology of Holding Times	20
Explanation of Qualifiers (Flags)	24
Analytical Log	25
LCS / LCSD Recoveries	30
MS / MSD Recoveries	32
Method Duplicate	34
Laboratory Review Checklist	35
DCS_SUMMARY	39
Chain of Custody	40
IOS_COC_114043	41
IOS_Check_List_114043	42
Sample Receipt Conformance Report	43



21-SEP-18

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **599188**

Chevron N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 599188. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 599188 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Kelsey Brooks'.

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 599188****ARCADIS, Midland, TX**

Chevron N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW007A-W-180914	W	09-14-18 09:46		599188-001
MW011A-W-180914	W	09-14-18 12:53		599188-002
MW002A-W-180914	W	09-14-18 09:46		599188-003
DUP1-W-180914	W	09-14-18 10:18		599188-004
MW016A-W-180914	W	09-14-18 10:34		599188-005
MW047-W-180914	W	09-14-18 00:00		599188-006
MW008M-W-180914	W	09-14-18 11:13		599188-007
MW089SA-W-180914	W	09-14-18 09:32		599188-008
MW004A-W-180914	W	09-14-18 09:57		599188-009
DUP6-W-180914	W	09-14-18 09:26		599188-010
IW023-W-180914	W	09-14-18 09:17		599188-011
MW093SA-W-180914	W	09-14-18 00:00		599188-012



CASE NARRATIVE SUMMARY



Client Name: *ARCADIS*

Project Name: *Chevron N. Eunice*

Project ID: *B0048789.0004*

Work Order Number: *599188*

Report Date: *21-SEP-18*

Date Received: *14-SEP-18*

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

Kelsey Brooks
Project Manager



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: MW007A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-001

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3040	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.19.18 01:29		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0115	0.00400	0.000246	mg/L	09.18.18 18:58		1
Barium	7440-39-3	0.0195	0.00400	0.000484	mg/L	09.18.18 18:58		1
Chromium	7440-47-3	0.763	0.00400	0.000525	mg/L	09.18.18 18:58		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.670	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW011A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0142	0.00400	0.000246	mg/L	09.18.18 19:01		1
Barium	7440-39-3	0.0265	0.00400	0.000484	mg/L	09.18.18 19:01		1
Chromium	7440-47-3	0.291	0.00400	0.000525	mg/L	09.18.18 19:01		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.242	0.0100	0.00273	mg/L	09.14.18 16:00		1

Sample Id: **MW011A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	646	10.0	1.72	mg/L	09.19.18 01:40		20



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW002A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-003

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3330	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1610	25.0	4.29	mg/L	09.19.18 01:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.00400	0.000246	mg/L	09.18.18 19:04		1
Barium	7440-39-3	0.0252	0.00400	0.000484	mg/L	09.18.18 19:04		1
Chromium	7440-47-3	0.963	0.00400	0.000525	mg/L	09.18.18 19:04		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.796	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP1-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-004

Date Collected: 09.14.18 10.18

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2080	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	576	10.0	1.72	mg/L	09.19.18 02:00		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0136	0.00400	0.000246	mg/L	09.18.18 19:07		1
Barium	7440-39-3	0.0252	0.00400	0.000484	mg/L	09.18.18 19:07		1
Chromium	7440-47-3	0.277	0.00400	0.000525	mg/L	09.18.18 19:07		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.239	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW016A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-005

Date Collected: 09.14.18 10.34

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1290	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	513	5.00	0.858	mg/L	09.19.18 02:11		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00914	0.00400	0.000246	mg/L	09.18.18 19:10		1
Barium	7440-39-3	0.200	0.00400	0.000484	mg/L	09.18.18 19:10		1
Chromium	7440-47-3	0.00528	0.00400	0.000525	mg/L	09.18.18 19:10		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW047-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-006

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1950	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	276	10.0	1.72	mg/L	09.19.18 02:52		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.00400	0.000246	mg/L	09.19.18 17:55		1
Barium	7440-39-3	0.0337	0.00400	0.000484	mg/L	09.19.18 17:55		1
Chromium	7440-47-3	0.0600	0.00400	0.000525	mg/L	09.19.18 17:55		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0507	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW008M-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-007

Date Collected: 09.14.18 11.13

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4600	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1350	25.0	4.29	mg/L	09.19.18 03:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00312	0.00400	0.000246	mg/L	09.18.18 19:17	J	1
Barium	7440-39-3	0.0831	0.00400	0.000484	mg/L	09.18.18 19:17		1
Chromium	7440-47-3	0.00775	0.00400	0.000525	mg/L	09.18.18 19:17		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188


ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW089SA-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-008

Date Collected: 09.14.18 09.32

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3780	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1040	25.0	4.29	mg/L	09.19.18 08:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	09.18.18 19:26		1
Barium	7440-39-3	0.0211	0.00400	0.000484	mg/L	09.18.18 19:26		1
Chromium	7440-47-3	1.18	0.00400	0.000525	mg/L	09.18.18 19:26		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.04	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW004A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-009

Date Collected: 09.14.18 09.57

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2230	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	632	10.0	1.72	mg/L	09.19.18 08:32		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0158	0.00400	0.000246	mg/L	09.18.18 19:30		1
Barium	7440-39-3	0.0231	0.00400	0.000484	mg/L	09.18.18 19:30		1
Chromium	7440-47-3	0.515	0.00400	0.000525	mg/L	09.18.18 19:30		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.497	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP6-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-010

Date Collected: 09.14.18 09.26

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2880	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	638	10.0	1.72	mg/L	09.19.18 08:42		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.18.18 19:33		1
Barium	7440-39-3	0.0250	0.00400	0.000484	mg/L	09.18.18 19:33		1
Chromium	7440-47-3	0.383	0.00400	0.000525	mg/L	09.18.18 19:33		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.269	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW023-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-011

Date Collected: 09.14.18 09.17

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2790	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	645	10.0	1.72	mg/L	09.19.18 08:53		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0102	0.00400	0.000246	mg/L	09.18.18 19:36		1
Barium	7440-39-3	0.0261	0.00400	0.000484	mg/L	09.18.18 19:36		1
Chromium	7440-47-3	0.376	0.00400	0.000525	mg/L	09.18.18 19:36		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.307	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW093SA-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-012

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3440	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	914	25.0	4.29	mg/L	09.19.18 09:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00859	0.00400	0.000246	mg/L	09.18.18 19:39		1
Barium	7440-39-3	0.0345	0.00400	0.000484	mg/L	09.18.18 19:39		1
Chromium	7440-47-3	0.494	0.00400	0.000525	mg/L	09.18.18 19:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.504	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **3063196-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063196-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 09:00	U	1

Sample Id: **3063315-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063315-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1

Sample Id: **3063679-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 3063679-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.17.18 16:00	U	1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX
Chevron N. Eunice

Sample Id: **7662477-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662477-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 18:13	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 18:13	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 18:13	U	1

Sample Id: **7662538-1-BLK**

Matrix: Water

Sample Depth:

Lab Sample Id: 7662538-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.18.18 23:25	U	1



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chloride by EPA 300

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW007A-W-180914	599188-001	09/14/18				09/19/18	28	5	P
MW011A-W-180914	599188-002	09/14/18				09/19/18	28	5	P
MW002A-W-180914	599188-003	09/14/18				09/19/18	28	5	P
DUP1-W-180914	599188-004	09/14/18				09/19/18	28	5	P
MW016A-W-180914	599188-005	09/14/18				09/19/18	28	5	P
MW047-W-180914	599188-006	09/14/18				09/19/18	28	5	P
MW008M-W-180914	599188-007	09/14/18				09/19/18	28	5	P
MW089SA-W-180914	599188-008	09/14/18				09/19/18	28	5	P
MW004A-W-180914	599188-009	09/14/18				09/19/18	28	5	P
DUP6-W-180914	599188-010	09/14/18				09/19/18	28	5	P
IW023-W-180914	599188-011	09/14/18				09/19/18	28	5	P
MW093SA-W-180914	599188-012	09/14/18				09/19/18	28	5	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : TDS by SM2540C

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW007A-W-180914	599188-001	09/14/18				09/17/18	7	3	P
MW011A-W-180914	599188-002	09/14/18				09/17/18	7	3	P
MW002A-W-180914	599188-003	09/14/18				09/17/18	7	3	P
DUP1-W-180914	599188-004	09/14/18				09/17/18	7	3	P
MW016A-W-180914	599188-005	09/14/18				09/17/18	7	3	P
MW047-W-180914	599188-006	09/14/18				09/17/18	7	3	P
MW008M-W-180914	599188-007	09/14/18				09/17/18	7	3	P
MW089SA-W-180914	599188-008	09/14/18				09/17/18	7	3	P
MW004A-W-180914	599188-009	09/14/18				09/17/18	7	3	P
DUP6-W-180914	599188-010	09/14/18				09/17/18	7	3	P
IW023-W-180914	599188-011	09/14/18				09/17/18	7	3	P
MW093SA-W-180914	599188-012	09/14/18				09/17/18	7	3	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Dissolved Metals by SW6020A

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW007A-W-180914	599188-001	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW011A-W-180914	599188-002	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW002A-W-180914	599188-003	09/14/18	09/18/18	180	4	09/18/18	180	0	P
DUP1-W-180914	599188-004	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW016A-W-180914	599188-005	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW047-W-180914	599188-006	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW008M-W-180914	599188-007	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW089SA-W-180914	599188-008	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW004A-W-180914	599188-009	09/14/18	09/18/18	180	4	09/18/18	180	0	P
DUP6-W-180914	599188-010	09/14/18	09/18/18	180	4	09/18/18	180	0	P
IW023-W-180914	599188-011	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW093SA-W-180914	599188-012	09/14/18	09/18/18	180	4	09/18/18	180	0	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chromium, Hexavalent by SW 7196A

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Hour)	Time Held Extracted (Hour)	Date Analyzed	Max Holding Time Analyzed (Hour)	Time Held Analyzed (Hour)	Q
MW007A-W-180914	599188-001	09/14/18				09/14/18	24	6	P
MW011A-W-180914	599188-002	09/14/18				09/14/18	24	3	P
MW002A-W-180914	599188-003	09/14/18				09/14/18	24	6	P
DUP1-W-180914	599188-004	09/14/18				09/14/18	24	6	P
MW016A-W-180914	599188-005	09/14/18				09/14/18	24	5	P
MW047-W-180914	599188-006	09/14/18				09/14/18	24	16	P
MW008M-W-180914	599188-007	09/14/18				09/14/18	24	5	P
MW089SA-W-180914	599188-008	09/14/18				09/14/18	24	6	P
MW004A-W-180914	599188-009	09/14/18				09/14/18	24	6	P
DUP6-W-180914	599188-010	09/14/18				09/14/18	24	7	P
IW023-W-180914	599188-011	09/14/18				09/14/18	24	7	P
MW093SA-W-180914	599188-012	09/14/18				09/14/18	24	16	P

F = These samples were analyzed outside the recommended holding time.

P = Samples analyzed within the recommended holding time.



Flagging Criteria



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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063196

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599188

Client Sample Id

DUP1-W-180914

MW002A-W-180914

MW007A-W-180914

MW008M-W-180914

MW011A-W-180914

Lab Sample Id

599188-004

599188-003

599188-001

599188-007

599188-002

3063196-1-BKS

3063196-1-BLK

3063196-1-BSD

599078-020 S

599078-020 SD

QC Types

SMP

SMP

SMP

SMP

SMP

BKS

BLK

BSD

MS

MSD



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063315

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599188

Client Sample Id**Lab Sample Id****QC Types**

DUP6-W-180914

599188-010

SMP

IW023-W-180914

599188-011

SMP

MW004A-W-180914

599188-009

SMP

MW016A-W-180914

599188-005

SMP

MW047-W-180914

599188-006

SMP

MW089SA-W-180914

599188-008

SMP

MW093SA-W-180914

599188-012

SMP

3063315-1-BKS

BKS

3063315-1-BLK

BLK

3063315-1-BSD

BSD

599188-005 S

MS

599188-005 SD

MSD



Analytical Log

Analytical Method:	Dissolved Metals by SW6020A	Batch #:	3063644
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599188

Client Sample Id	Lab Sample Id	QC Types
DUP1-W-180914	599188-004	SMP
DUP6-W-180914	599188-010	SMP
IW023-W-180914	599188-011	SMP
MW002A-W-180914	599188-003	SMP
MW004A-W-180914	599188-009	SMP
MW007A-W-180914	599188-001	SMP
MW008M-W-180914	599188-007	SMP
MW011A-W-180914	599188-002	SMP
MW016A-W-180914	599188-005	SMP
MW047-W-180914	599188-006	SMP
MW089SA-W-180914	599188-008	SMP
MW093SA-W-180914	599188-012	SMP
	599078-020 S	MS
	599078-020 SD	MSD
	7662477-1-BKS	BKS
	7662477-1-BLK	BLK
	7662477-1-BSD	BSD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063679
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599188

Client Sample Id	Lab Sample Id	QC Types
DUP1-W-180914	599188-004	SMP
DUP6-W-180914	599188-010	SMP
IW023-W-180914	599188-011	SMP
MW002A-W-180914	599188-003	SMP
MW004A-W-180914	599188-009	SMP
MW007A-W-180914	599188-001	SMP
MW008M-W-180914	599188-007	SMP
MW011A-W-180914	599188-002	SMP
MW016A-W-180914	599188-005	SMP
MW047-W-180914	599188-006	SMP
MW089SA-W-180914	599188-008	SMP
MW093SA-W-180914	599188-012	SMP
	3063679-1-BKS	BKS
	3063679-1-BLK	BLK
	3063679-1-BSD	BSD
	599078-021 D	MD
	599188-001 D	MD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063723
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599188

Client Sample Id	Lab Sample Id	QC Types
DUP1-W-180914	599188-004	SMP
DUP6-W-180914	599188-010	SMP
IW023-W-180914	599188-011	SMP
MW002A-W-180914	599188-003	SMP
MW004A-W-180914	599188-009	SMP
MW007A-W-180914	599188-001	SMP
MW008M-W-180914	599188-007	SMP
MW011A-W-180914	599188-002	SMP
MW016A-W-180914	599188-005	SMP
MW047-W-180914	599188-006	SMP
MW089SA-W-180914	599188-008	SMP
MW093SA-W-180914	599188-012	SMP
	599196-003 S	MS
	599196-003 SD	MSD
	599337-001 S	MS
	599337-001 SD	MSD
	7662538-1-BKS	BKS
	7662538-1-BLK	BLK
	7662538-1-BSD	BSD



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Analyst: SCM

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063723

Sample: 7662538-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.0858	25.0	26.2	105	25.0	26.1	104	0	90-110	20	

Analyst: OJS

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063196

Sample: 3063196-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chromium, Hexavalent by SW 7196A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.00273	0.0400	0.0399	100	0.0400	0.0402	101	1	85-115	20	

Analyst: OJS

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063315

Sample: 3063315-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Chromium, Hexavalent by SW 7196A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<0.00273	0.0400	0.0400	100	0.0400	0.0406	102	1	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Analyst: DEP

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063644

Sample: 7662477-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.101	101	0.100	0.100	100	1	80-120	20	
Barium	<0.000484	0.100	0.0992	99	0.100	0.0977	98	2	80-120	20	
Chromium	<0.000525	0.100	0.0991	99	0.100	0.0983	98	1	80-120	20	

Analyst: OJS

Date Prepared: 09/17/2018

Date Analyzed: 09/17/2018

Lab Batch ID: 3063679

Sample: 3063679-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Total Dissolved Solids	<5.00	1000	962	96	1000	979	98	2	80-120	10	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Lab Batch ID: 3063723

QC- Sample ID: 599196-003 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/19/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	38.6	25.0	64.5	104	25.0	64.5	104	0	90-110	20	

Lab Batch ID: 3063723

QC- Sample ID: 599337-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/19/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	27.6	25.0	54.5	108	25.0	54.6	108	0	90-110	20	

Lab Batch ID: 3063196

QC- Sample ID: 599078-020 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.200	0.203	102	0.200	0.208	104	2	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times |(C-F)/(C+E)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Lab Batch ID: 3063315

QC- Sample ID: 599188-005 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.200	0.232	116	0.200	0.233	117	0	75-125	20	

Lab Batch ID: 3063644

QC- Sample ID: 599078-020 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.0149	0.100	0.115	100	0.100	0.115	100	0	75-125	20	
Barium	0.101	0.100	0.196	95	0.100	0.199	98	2	75-125	20	
Chromium	<0.000525	0.100	0.0997	100	0.100	0.0996	100	0	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: Chevron N. Eunice

Work Order #: 599188

Lab Batch #: 3063679

Date Analyzed: 09/17/2018 16:00

Date Prepared: 09/17/2018

Project ID: B0048789.0004

Analyst: OJS

QC- Sample ID: 599078-021 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3160	3240	3	10	

Lab Batch #: 3063679

Date Analyzed: 09/17/2018 16:00

Date Prepared: 09/17/2018

Analyst: OJS

QC- Sample ID: 599188-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3040	3080	1	10	

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

BRL - Below Reporting Limit

Attachment A Laboratory Data Package Cover Page

Project Name: **Chevron N. Eunice**Laboratory Number: **599188**This Data package consists of : Laboratory Batch No(s) **3063679, 3063315, 3063196, 3063723, 3063**

This signature page, the laboratory review checklist, and the following reportable data:

- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- a) Items consistent with NELAC 5
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs) and
 - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
- a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies, observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC 25.6 and was last inspection by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Brooks
Name (Printed)


Signature

Project Manager
Official Title (printed)

21-SEP-18
Date

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES		LRC Date :		21-SEP-18	
Project Name:		Chevron N. Eunice		Laboratory Job Number :		599188	
Reviewer Name:		KEB		Batch Number(s) :		3063679, 3063315, 3063196, 3063723, 3063644	
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-Custody (COC)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and Quality Control (QC) Identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test Reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results <MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, were TICs reported?			X		
R4	O	Surrogate Recovery Data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test Reports/Summary Forms for Blank Samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency ?	X				
		Were method blanks taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures ?	X				
		Were Blank Concentrations <MQL?	X				
R6	OI	Laboratory Control Samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within the QC limits?	X				
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within the laboratory QC limits?	X				
R8	OI	Analytical Duplicate Data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method Quantitation Limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES	LRC Date :		21-SEP-18				
Project Name:		Chevron N. Eunice	Laboratory Job Number :		599188				
Reviewer Name:		KEB	Batch Number(s) :		3063679, 3063315, 3063196, 3063723, 3063644				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵		
S1	OI	Initial Calibration (ICAL)							
		Were response factors and/or relative response factors for each analyte within QC limits?	X						
		Were percent RSDs or correlation coefficient criteria met?	X						
		Was the number of standards recommended in the method used for all analytes?	X						
		Were all points generated between the lowest and the highest standard used to calculate the curve?	X						
		Are ICAL data available for all instruments used?	X						
		Has the initial calibration curve been verified using an appropriate second source standard?	X						
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and continuing calibration blank							
		Was the CCV analyzed at the method-required frequency?	X						
		Were percent differences for each analyte within the method-required QC limits?	X						
		Was the ICAL curve verified for each analyte?	X						
		Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	X						
S3	O	Mass Spectral Tuning							
		Was the appropriate compound for the method used for tuning?			X				
		Were ion abundance data within the method-required QC limits?			X				
S4	O	Internal Standard (IS)							
		Were IS area counts and retention times within the method-required QC limits?			X				
S5	OI	Raw Data (NELAC 5.5.10)							
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X						
		Were data associated with manual integrations flagged on the raw data?	X						
S6	O	Dual Column Confirmation							
		Did dual column confirmation results meet the method-required QC?			X				
S7	O	Tentatively Identified Compounds (TICs)							
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X				
S8	I	Interference Check Sample (ICS) Results							
		Were percent recoveries within method QC limits?	X						
S9	I	Serial Dilutions, Post Digestions Spikes, and Method of Standard Additions							
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X						
S10	OI	Method Detection Limit (MDL) Studies							
		Was a MDL study performed for each reported analyte?	X						
		Is the MDL either adjusted or supported by the analysis of DCSs?	X						
S11	OI	Proficiency Test Reports							
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X						
S12	OI	Standards Documentation							
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X						
S13	OI	Compound/Analyte Identification Procedures							
		Are the procedures for compound/analyte identification documented?	X						
S14	OI	Demonstration of Analyst Competency (DOC)							
		Was DOC conducted consistent with NELAC Chapter 5?	X						
		Is documentation of the analyst's competency up-to-date and on file?	X						
S15	OI	Verification/Validation Documentation for Methods (NELAC Chapter 5)							
		Are all methods used to generate the data documented, verified, and validated, where applicable?	X						
S16	OI	Laboratory Standard Operating Procedures (SOPs)							
		Are laboratory SOPs current and on file for each method performed?	X						

- Items identified by the letter "R" must be included in the laboratory data package submitted to the TCEQ-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Attachment A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: XENCO LABORATORIES	LRC Date: 21-SEP-18
Project Name: Chevron N. Eunice	Laboratory Job Number: 599188
Reviewer Name: KEB	Batch Number(s) : 3063679, 3063315, 3063196, 3063723, 3063644
ER# 1	DESCRIPTION

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No is checked on the LRC).



ARCADIS, Midland, TX

Chevron N. Eunice

Analytical Method: **Chloride by EPA 300**

Matrix: **Water**

Prep Method: **E300P**

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chloride	0.0858	0.500	0.250	0.177	mg/L

Analytical Method: **Chromium, Hexavalent by SW 7196A**

Matrix: **Water**

Prep Method:

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chromium, Hexavalent	0.00273	0.0100	0.00800	0.00510	mg/L

Analytical Method: **Dissolved Metals by SW6020A**

Matrix: **Water**

Prep Method: **SW3010A**

Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Arsenic	0.000246	0.00400	0.00200	0.00294	mg/L
Barium	0.000484	0.00400	0.00400	0.00401	mg/L
Chromium	0.000525	0.00400	0.00200	0.00400	mg/L



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order # **599188**

Page **1** of **4**

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City: Roseville State: CA Zip: 95678 Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Preservative Filtered (✓) # of Containers Container Information		B 1		C 3		E 4		E 4			
PARAMETER ANALYSIS & METHOD													
Sample ID MW001A-W-180914 MW001A-W-180914 MW002A-W-180914 DUP-1-W-180914 MW006A-W-180914 MW007-W-180914 MW008-W-180914 MW009SA-W-180914 MW004A-W-180914 DUP-1-W-180914 MW003-W-180914 MW003SA-W-180914		Collection Date: 3/14/18 Time: 0944 Date: 3/14/18 Time: 1014 Date: 3/14/18 Time: 1034 Date: 3/14/18 Time: 1113 Date: 3/14/18 Time: 0950 Date: 3/14/18 Time: 0926 Date: 3/14/18 Time: 0917 Date: 3/14/18 Time: 0950 Date: 3/14/18 Time: 0904		Type (✓) Comp Grab X X X X X X X X X X		Matrix W W W W W W W W W W W		BTEX 8021B TPH GRO & DRO Dissolved As, Mn, Fe, Cr 6010B Dissolved Hex Chromium 7196 Chloride & TDS		REMARKS			
Special Instructions/Comments: Temp. 5.3 R80.0													
Relinquished By Printed Name: Shawnne Comer Signature: <i>[Signature]</i> Date/Time: 3/14/18 15:14													
Relinquished By Printed Name: Arcadis Signature: <i>[Signature]</i> Date/Time: 3/14/18 15:14													
Relinquished By Printed Name: Xenco Signature: <i>[Signature]</i> Date/Time: 3/14/18 15:14													

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK - Retained by Arcadis

Inter-Office Shipment

IOS Number **114043**

Date/Time: 09/14/18 15:39

Created by: Shawnee Gomez

Please send report to: Kelsey Brooks

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave, Midland TX 79701

Lab# To: **Houston**

Air Bill No.: 773225421654

E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
599188-001	W	MW07A-W-180914	09/14/18 09:46	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-002	W	MW011A-W-180914	09/14/18 12:53	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-003	W	MW002A-W-180914	09/14/18 09:46	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-004	W	DUP-1-N-180914	09/14/18 10:18	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-005	W	MW016A-W-180914	09/14/18 10:34	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-006	W	MW047-W-180914	09/14/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-007	W	MW008-M-180914	09/14/18 11:13	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-008	W	MW089SA-W-180914	09/14/18 09:32	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-009	W	MW004A-W-180914	09/14/18 09:57	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-010	W	DUP-6-W-180914	09/14/18 09:26	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-011	W	IW023-W-180914	09/14/18 09:17	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-012	W	MW0935A-W-180914	09/14/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	

Inter Office Shipment or Sample Comments:

Relinquished By:

Shawnee Gomez

Shawnee Gomez

Received By:

Rene Vandenberghe

Rene Vandenberghe

Date Relinquished: 09/14/2018

Date Received: 09/15/2018 09:30

Cooler Temperature: 3.2



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 114043

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou-068

Sent By: Shawnee Gomez

Date Sent: 09/14/2018 03:39 PM

Received By: Rene Vandenberghe

Date Received: 09/15/2018 09:30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

 Rene Vandenberghe

Date: 09/15/2018



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 09/14/2018 03:14:00 PM

Work Order #: 599188

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	5.3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Stafford
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst: SG

PH Device/Lot#: 213315

Checklist completed by:

Shawnee Gomez

Date: 09/14/2018

Checklist reviewed by:

Kelsey Brooks

Date: 09/17/2018

Analytical Report 599188

for

ARCADIS

Project Manager: Brett Krehbiel

Chevron N. Eunice

B0048789.0004

26-SEP-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

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

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

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



Table of Contents

Cover Page	1
Cover Letter	3
Sample ID Cross Reference	4
LCASE_NARR_SUMMARY	5
Certificate of Analysis (Detailed Report)	6
Chronology of Holding Times	20
Explanation of Qualifiers (Flags)	24
Analytical Log	25
LCS / LCSD Recoveries	30
MS / MSD Recoveries	32
Method Duplicate	34
Laboratory Review Checklist	35
DCS_SUMMARY	39
Chain of Custody	40
IOS_COC_114043	41
IOS_Check_List_114043	42
Sample Receipt Conformance Report	43



26-SEP-18

Project Manager: **Brett Krehbiel**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: XENCO Report No(s): **599188**

Chevron N. Eunice

Project Address: Eunice, NM

Brett Krehbiel:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 599188. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 599188 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Kelsey Brooks'.

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 599188****ARCADIS, Midland, TX**

Chevron N. Eunice

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW007A-W-180914	W	09-14-18 09:46		599188-001
MW011A-W-180914	W	09-14-18 12:53		599188-002
MW002A-W-180914	W	09-14-18 09:46		599188-003
DUP01-W-180914	W	09-14-18 10:18		599188-004
MW016A-W-180914	W	09-14-18 10:34		599188-005
MW047-W-180914	W	09-14-18 00:00		599188-006
MW008M-W-180914	W	09-14-18 11:13		599188-007
MW089SA-W-180914	W	09-14-18 09:32		599188-008
MW004A-W-180914	W	09-14-18 09:57		599188-009
DUP06-W-180914	W	09-14-18 09:26		599188-010
IW023-W-180914	W	09-14-18 09:17		599188-011
MW093SA-W-180914	W	09-14-18 00:00		599188-012



CASE NARRATIVE SUMMARY



Client Name: *ARCADIS*

Project Name: *Chevron N. Eunice*

Project ID: *B0048789.0004*

Work Order Number: *599188*

Report Date: *26-SEP-18*

Date Received: *14-SEP-18*

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

Kelsey Brooks
Project Manager



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW007A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-001

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3040	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	801	10.0	1.72	mg/L	09.19.18 01:29		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0115	0.00400	0.000246	mg/L	09.18.18 18:58		1
Barium	7440-39-3	0.0195	0.00400	0.000484	mg/L	09.18.18 18:58		1
Chromium	7440-47-3	0.763	0.00400	0.000525	mg/L	09.18.18 18:58		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.670	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW011A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2160	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0142	0.00400	0.000246	mg/L	09.18.18 19:01		1
Barium	7440-39-3	0.0265	0.00400	0.000484	mg/L	09.18.18 19:01		1
Chromium	7440-47-3	0.291	0.00400	0.000525	mg/L	09.18.18 19:01		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.242	0.0100	0.00273	mg/L	09.14.18 16:00		1

Sample Id: MW011A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-002

Date Collected: 09.14.18 12.53

Date Received: 09.14.18 15.14

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	646	10.0	1.72	mg/L	09.19.18 01:40		20



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW002A-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-003

Date Collected: 09.14.18 09.46

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3330	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1610	25.0	4.29	mg/L	09.19.18 01:50		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0195	0.00400	0.000246	mg/L	09.18.18 19:04		1
Barium	7440-39-3	0.0252	0.00400	0.000484	mg/L	09.18.18 19:04		1
Chromium	7440-47-3	0.963	0.00400	0.000525	mg/L	09.18.18 19:04		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.796	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP01-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-004

Date Collected: 09.14.18 10.18

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2080	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	576	10.0	1.72	mg/L	09.19.18 02:00		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0136	0.00400	0.000246	mg/L	09.18.18 19:07		1
Barium	7440-39-3	0.0252	0.00400	0.000484	mg/L	09.18.18 19:07		1
Chromium	7440-47-3	0.277	0.00400	0.000525	mg/L	09.18.18 19:07		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.239	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW016A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-005

Date Collected: 09.14.18 10.34

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1290	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	513	5.00	0.858	mg/L	09.19.18 02:11		10

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00914	0.00400	0.000246	mg/L	09.18.18 19:10		1
Barium	7440-39-3	0.200	0.00400	0.000484	mg/L	09.18.18 19:10		1
Chromium	7440-47-3	0.00528	0.00400	0.000525	mg/L	09.18.18 19:10		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW047-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-006

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	1950	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	276	10.0	1.72	mg/L	09.19.18 02:52		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0120	0.00400	0.000246	mg/L	09.19.18 17:55		1
Barium	7440-39-3	0.0337	0.00400	0.000484	mg/L	09.19.18 17:55		1
Chromium	7440-47-3	0.0600	0.00400	0.000525	mg/L	09.19.18 17:55		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.0507	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: MW008M-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-007

Date Collected: 09.14.18 11.13

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	4600	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1350	25.0	4.29	mg/L	09.19.18 03:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00312	0.00400	0.000246	mg/L	09.18.18 19:17	J	1
Barium	7440-39-3	0.0831	0.00400	0.000484	mg/L	09.18.18 19:17		1
Chromium	7440-47-3	0.00775	0.00400	0.000525	mg/L	09.18.18 19:17		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW089SA-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-008

Date Collected: 09.14.18 09.32

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3780	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1040	25.0	4.29	mg/L	09.19.18 08:22		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0109	0.00400	0.000246	mg/L	09.18.18 19:26		1
Barium	7440-39-3	0.0211	0.00400	0.000484	mg/L	09.18.18 19:26		1
Chromium	7440-47-3	1.18	0.00400	0.000525	mg/L	09.18.18 19:26		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	1.04	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW004A-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-009

Date Collected: 09.14.18 09.57

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2230	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	632	10.0	1.72	mg/L	09.19.18 08:32		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0158	0.00400	0.000246	mg/L	09.18.18 19:30		1
Barium	7440-39-3	0.0231	0.00400	0.000484	mg/L	09.18.18 19:30		1
Chromium	7440-47-3	0.515	0.00400	0.000525	mg/L	09.18.18 19:30		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.497	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **DUP06-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-010

Date Collected: 09.14.18 09.26

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2880	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	638	10.0	1.72	mg/L	09.19.18 08:42		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0101	0.00400	0.000246	mg/L	09.18.18 19:33		1
Barium	7440-39-3	0.0250	0.00400	0.000484	mg/L	09.18.18 19:33		1
Chromium	7440-47-3	0.383	0.00400	0.000525	mg/L	09.18.18 19:33		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.269	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: IW023-W-180914

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-011

Date Collected: 09.14.18 09.17

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	2790	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	645	10.0	1.72	mg/L	09.19.18 08:53		20

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.0102	0.00400	0.000246	mg/L	09.18.18 19:36		1
Barium	7440-39-3	0.0261	0.00400	0.000484	mg/L	09.18.18 19:36		1
Chromium	7440-47-3	0.376	0.00400	0.000525	mg/L	09.18.18 19:36		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.307	0.0100	0.00273	mg/L	09.14.18 16:00		1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: **MW093SA-W-180914**

Matrix: Water

Sample Depth:

Lab Sample Id: 599188-012

Date Collected: 09.14.18 00.00

Date Received: 09.14.18 15.14

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	3440	5.00	5.00	mg/L	09.17.18 16:00		1

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	914	25.0	4.29	mg/L	09.19.18 09:03		50

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	0.00859	0.00400	0.000246	mg/L	09.18.18 19:39		1
Barium	7440-39-3	0.0345	0.00400	0.000484	mg/L	09.18.18 19:39		1
Chromium	7440-47-3	0.494	0.00400	0.000525	mg/L	09.18.18 19:39		1

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	0.504	0.0500	0.0136	mg/L	09.14.18 16:00		5



Certificate of Analytical Results

599188

ARCADIS, Midland, TX

Chevron N. Eunice



Sample Id: 3063196-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3063196-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063196

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 09:00	U	1

Sample Id: 3063315-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3063315-1-BLK

Date Collected:

Date Received:

Analytical Method: Chromium, Hexavalent by SW 7196A

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063315

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chromium, Hexavalent	18540-29-9	<0.00273	0.0100	0.00273	mg/L	09.14.18 16:00	U	1

Sample Id: 3063679-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 3063679-1-BLK

Date Collected:

Date Received:

Analytical Method: TDS by SM2540C

Prep Method:

Analyst: OJS

% Moist:

Tech: OJS

Seq Number: 3063679

Date Prep:

Prep seq:

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Total Dissolved Solids	1642222	<5.00	5.00	5.00	mg/L	09.17.18 16:00	U	1



Certificate of Analytical Results

599188



ARCADIS, Midland, TX

Chevron N. Eunice

Sample Id: 7662477-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662477-1-BLK

Date Collected:

Date Received:

Analytical Method: Dissolved Metals by SW6020A

Prep Method: 3010A

Analyst: DEP

% Moist:

Tech: AHI

Seq Number: 3063644

Date Prep: 09.18.18 09.00

Subcontractor: SUB: TX104704215-18-27

Prep seq: 7662477

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Arsenic	7440-38-2	<0.000246	0.00400	0.000246	mg/L	09.18.18 18:13	U	1
Barium	7440-39-3	<0.000484	0.00400	0.000484	mg/L	09.18.18 18:13	U	1
Chromium	7440-47-3	<0.000525	0.00400	0.000525	mg/L	09.18.18 18:13	U	1

Sample Id: 7662538-1-BLK

Matrix: Water

Sample Depth:

Lab Sample Id: 7662538-1-BLK

Date Collected:

Date Received:

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: SCM

% Moist:

Tech: SCM

Seq Number: 3063723

Date Prep: 09.18.18 15.00

Prep seq: 7662538

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.0858	0.500	0.0858	mg/L	09.18.18 23:25	U	1



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chloride by EPA 300

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW007A-W-180914	599188-001	09/14/18				09/19/18	28	5	P
MW011A-W-180914	599188-002	09/14/18				09/19/18	28	5	P
MW002A-W-180914	599188-003	09/14/18				09/19/18	28	5	P
DUP01-W-180914	599188-004	09/14/18				09/19/18	28	5	P
MW016A-W-180914	599188-005	09/14/18				09/19/18	28	5	P
MW047-W-180914	599188-006	09/14/18				09/19/18	28	5	P
MW008M-W-180914	599188-007	09/14/18				09/19/18	28	5	P
MW089SA-W-180914	599188-008	09/14/18				09/19/18	28	5	P
MW004A-W-180914	599188-009	09/14/18				09/19/18	28	5	P
DUP06-W-180914	599188-010	09/14/18				09/19/18	28	5	P
IW023-W-180914	599188-011	09/14/18				09/19/18	28	5	P
MW093SA-W-180914	599188-012	09/14/18				09/19/18	28	5	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : TDS by SM2540C

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW007A-W-180914	599188-001	09/14/18				09/17/18	7	3	P
MW011A-W-180914	599188-002	09/14/18				09/17/18	7	3	P
MW002A-W-180914	599188-003	09/14/18				09/17/18	7	3	P
DUP01-W-180914	599188-004	09/14/18				09/17/18	7	3	P
MW016A-W-180914	599188-005	09/14/18				09/17/18	7	3	P
MW047-W-180914	599188-006	09/14/18				09/17/18	7	3	P
MW008M-W-180914	599188-007	09/14/18				09/17/18	7	3	P
MW089SA-W-180914	599188-008	09/14/18				09/17/18	7	3	P
MW004A-W-180914	599188-009	09/14/18				09/17/18	7	3	P
DUP06-W-180914	599188-010	09/14/18				09/17/18	7	3	P
IW023-W-180914	599188-011	09/14/18				09/17/18	7	3	P
MW093SA-W-180914	599188-012	09/14/18				09/17/18	7	3	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Dissolved Metals by SW6020A

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
MW007A-W-180914	599188-001	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW011A-W-180914	599188-002	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW002A-W-180914	599188-003	09/14/18	09/18/18	180	4	09/18/18	180	0	P
DUP01-W-180914	599188-004	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW016A-W-180914	599188-005	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW047-W-180914	599188-006	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW008M-W-180914	599188-007	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW089SA-W-180914	599188-008	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW004A-W-180914	599188-009	09/14/18	09/18/18	180	4	09/18/18	180	0	P
DUP06-W-180914	599188-010	09/14/18	09/18/18	180	4	09/18/18	180	0	P
IW023-W-180914	599188-011	09/14/18	09/18/18	180	4	09/18/18	180	0	P
MW093SA-W-180914	599188-012	09/14/18	09/18/18	180	4	09/18/18	180	0	P



CHRONOLOGY OF HOLDING TIMES



Analytical Method : Chromium, Hexavalent by SW 7196A

Client : ARCADIS

Work Order #: **599188**

Project ID: B0048789.0004

Date Received: 09/14/18

Field Sample ID	Lab Sample ID	Date Collected	Date Extracted	Max Holding Time Extracted (Hour)	Time Held Extracted (Hour)	Date Analyzed	Max Holding Time Analyzed (Hour)	Time Held Analyzed (Hour)	Q
MW007A-W-180914	599188-001	09/14/18				09/14/18	24	6	P
MW011A-W-180914	599188-002	09/14/18				09/14/18	24	3	P
MW002A-W-180914	599188-003	09/14/18				09/14/18	24	6	P
DUP01-W-180914	599188-004	09/14/18				09/14/18	24	6	P
MW016A-W-180914	599188-005	09/14/18				09/14/18	24	5	P
MW047-W-180914	599188-006	09/14/18				09/14/18	24	16	P
MW008M-W-180914	599188-007	09/14/18				09/14/18	24	5	P
MW089SA-W-180914	599188-008	09/14/18				09/14/18	24	6	P
MW004A-W-180914	599188-009	09/14/18				09/14/18	24	6	P
DUP06-W-180914	599188-010	09/14/18				09/14/18	24	7	P
IW023-W-180914	599188-011	09/14/18				09/14/18	24	7	P
MW093SA-W-180914	599188-012	09/14/18				09/14/18	24	16	P

F = These samples were analyzed outside the recommended holding time.

P = Samples analyzed within the recommended holding time.



Flagging Criteria



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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063196

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599188

Client Sample Id

DUP01-W-180914

MW002A-W-180914

MW007A-W-180914

MW008M-W-180914

MW011A-W-180914

Lab Sample Id

599188-004

599188-003

599188-001

599188-007

599188-002

3063196-1-BKS

3063196-1-BLK

3063196-1-BSD

599078-020 S

599078-020 SD

QC Types

SMP

SMP

SMP

SMP

SMP

BKS

BLK

BSD

MS

MSD



Analytical Log

Analytical Method: Chromium, Hexavalent by SW 7196A

Batch #: 3063315

Project Name: Chevron N. Eunice

Project ID: B0048789.0004

Client Name: ARCADIS

WO Number: 599188

Client Sample Id

DUP06-W-180914

IW023-W-180914

MW004A-W-180914

MW016A-W-180914

MW047-W-180914

MW089SA-W-180914

MW093SA-W-180914

Lab Sample Id

599188-010

599188-011

599188-009

599188-005

599188-006

599188-008

599188-012

3063315-1-BKS

3063315-1-BLK

3063315-1-BSD

599188-005 S

599188-005 SD

QC Types

SMP

SMP

SMP

SMP

SMP

SMP

SMP

BKS

BLK

BSD

MS

MSD



Analytical Log

Analytical Method: Dissolved Metals by SW6020A
 Project Name: Chevron N. Eunice
 Client Name: ARCADIS

Batch #: 3063644
 Project ID: B0048789.0004
 WO Number: 599188

Client Sample Id	Lab Sample Id	QC Types
DUP01-W-180914	599188-004	SMP
DUP06-W-180914	599188-010	SMP
IW023-W-180914	599188-011	SMP
MW002A-W-180914	599188-003	SMP
MW004A-W-180914	599188-009	SMP
MW007A-W-180914	599188-001	SMP
MW008M-W-180914	599188-007	SMP
MW011A-W-180914	599188-002	SMP
MW016A-W-180914	599188-005	SMP
MW047-W-180914	599188-006	SMP
MW089SA-W-180914	599188-008	SMP
MW093SA-W-180914	599188-012	SMP
	599078-020 S	MS
	599078-020 SD	MSD
	7662477-1-BKS	BKS
	7662477-1-BLK	BLK
	7662477-1-BSD	BSD



Analytical Log

Analytical Method:	TDS by SM2540C	Batch #:	3063679
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599188

Client Sample Id	Lab Sample Id	QC Types
DUP01-W-180914	599188-004	SMP
DUP06-W-180914	599188-010	SMP
IW023-W-180914	599188-011	SMP
MW002A-W-180914	599188-003	SMP
MW004A-W-180914	599188-009	SMP
MW007A-W-180914	599188-001	SMP
MW008M-W-180914	599188-007	SMP
MW011A-W-180914	599188-002	SMP
MW016A-W-180914	599188-005	SMP
MW047-W-180914	599188-006	SMP
MW089SA-W-180914	599188-008	SMP
MW093SA-W-180914	599188-012	SMP
	3063679-1-BKS	BKS
	3063679-1-BLK	BLK
	3063679-1-BSD	BSD
	599078-021 D	MD
	599188-001 D	MD



Analytical Log

Analytical Method:	Chloride by EPA 300	Batch #:	3063723
Project Name:	Chevron N. Eunice	Project ID:	B0048789.0004
Client Name:	ARCADIS	WO Number:	599188

Client Sample Id	Lab Sample Id	QC Types
DUP01-W-180914	599188-004	SMP
DUP06-W-180914	599188-010	SMP
IW023-W-180914	599188-011	SMP
MW002A-W-180914	599188-003	SMP
MW004A-W-180914	599188-009	SMP
MW007A-W-180914	599188-001	SMP
MW008M-W-180914	599188-007	SMP
MW011A-W-180914	599188-002	SMP
MW016A-W-180914	599188-005	SMP
MW047-W-180914	599188-006	SMP
MW089SA-W-180914	599188-008	SMP
MW093SA-W-180914	599188-012	SMP
	599196-003 S	MS
	599196-003 SD	MSD
	599337-001 S	MS
	599337-001 SD	MSD
	7662538-1-BKS	BKS
	7662538-1-BLK	BLK
	7662538-1-BSD	BSD



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Analyst: SCM

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063723

Sample: 7662538-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.0858	25.0	26.2	105	25.0	26.1	104	0	90-110	20	

Analyst: OJS

Date Analyzed: 09/14/2018

Lab Batch ID: 3063196

Sample: 3063196-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.0400	0.0399	100	0.0400	0.0402	101	1	85-115	20	

Analyst: OJS

Date Prepared: 09/14/2018

Date Analyzed: 09/14/2018

Lab Batch ID: 3063315

Sample: 3063315-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.0400	0.0400	100	0.0400	0.0406	102	1	85-115	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Analyst: DEP

Date Prepared: 09/18/2018

Date Analyzed: 09/18/2018

Lab Batch ID: 3063644

Sample: 7662477-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Arsenic	<0.000246	0.100	0.101	101	0.100	0.100	100	1	80-120	20	
Barium	<0.000484	0.100	0.0992	99	0.100	0.0977	98	2	80-120	20	
Chromium	<0.000525	0.100	0.0991	99	0.100	0.0983	98	1	80-120	20	

Analyst: OJS

Date Prepared: 09/17/2018

Date Analyzed: 09/17/2018

Lab Batch ID: 3063679

Sample: 3063679-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TDS by SM2540C	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Total Dissolved Solids	<5.00	1000	962	96	1000	979	98	2	80-120	10	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Lab Batch ID: 3063723

QC- Sample ID: 599196-003 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/19/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	38.6	25.0	64.5	104	25.0	64.5	104	0	90-110	20	

Lab Batch ID: 3063723

QC- Sample ID: 599337-001 S

Batch #: 1 Matrix: Drinking Water

Date Analyzed: 09/19/2018

Date Prepared: 09/18/2018

Analyst: SCM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	27.6	25.0	54.5	108	25.0	54.6	108	0	90-110	20	

Lab Batch ID: 3063196

QC- Sample ID: 599078-020 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.200	0.203	102	0.200	0.208	104	2	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+E)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Chevron N. Eunice

Work Order #: 599188

Project ID: B0048789.0004

Lab Batch ID: 3063315

QC- Sample ID: 599188-005 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2018

Date Prepared: 09/14/2018

Analyst: OJS

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chromium, Hexavalent by SW 7196A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chromium, Hexavalent	<0.00273	0.200	0.232	116	0.200	0.233	117	0	75-125	20	

Lab Batch ID: 3063644

QC- Sample ID: 599078-020 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/18/2018

Date Prepared: 09/18/2018

Analyst: DEP

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Dissolved Metals by SW6020A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	0.0149	0.100	0.115	100	0.100	0.115	100	0	75-125	20	
Barium	0.101	0.100	0.196	95	0.100	0.199	98	2	75-125	20	
Chromium	<0.000525	0.100	0.0997	100	0.100	0.0996	100	0	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: Chevron N. Eunice

Work Order #: 599188

Lab Batch #: 3063679

Project ID: B0048789.0004

Date Analyzed: 09/17/2018 16:00

Date Prepared: 09/17/2018

Analyst: OJS

QC- Sample ID: 599078-021 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3160	3240	3	10	

Lab Batch #: 3063679

Date Analyzed: 09/17/2018 16:00

Date Prepared: 09/17/2018

Analyst: OJS

QC- Sample ID: 599188-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	%RPD	RPD Limit	Flag
Analyte					
Total Dissolved Solids	3040	3080	1	10	

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

BRL - Below Reporting Limit

Attachment A Laboratory Data Package Cover Page

Project Name: **Chevron N. Eunice**Laboratory Number: **599188**This Data package consists of : Laboratory Batch No(s) **3063679, 3063315, 3063196, 3063723, 3063**

This signature page, the laboratory review checklist, and the following reportable data:

- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- a) Items consistent with NELAC 5
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs) and
 - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
- a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies, observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: ☐ This laboratory meets an exception under 30 TAC 25.6 and was last inspection by ☐ TCEQ or ☐ _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Brooks
Name (Printed)


Signature

Project Manager
Official Title (printed)

26-SEP-18
Date

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data						
Laboratory Name:		XENCO LABORATORIES		LRC Date :		26-SEP-18
Project Name:		Chevron N. Eunice		Laboratory Job Number :		599188
Reviewer Name:		KEB		Batch Number(s) :		3063679, 3063315, 3063196, 3063723, 3063644
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴ ER# ⁵
R1	OI	Chain-of-Custody (COC)				
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X			
		Were all departures from standard conditions described in an exception report?			X	
R2	OI	Sample and Quality Control (QC) Identification				
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X			
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X			
R3	OI	Test Reports				
		Were all samples prepared and analyzed within holding times?	X			
		Other than those results <MQL, were all other raw values bracketed by calibration standards?	X			
		Were calculations checked by a peer or supervisor?	X			
		Were all analyte identifications checked by a peer or supervisor?	X			
		Were sample detection limits reported for all analytes not detected?	X			
		Were all results for soil and sediment samples reported on a dry weight basis?			X	
		Were % moisture (or solids) reported for all soil and sediment samples?			X	
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X	
		If required for the project, were TICs reported?			X	
R4	O	Surrogate Recovery Data				
		Were surrogates added prior to extraction?			X	
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X	
R5	OI	Test Reports/Summary Forms for Blank Samples				
		Were appropriate type(s) of blanks analyzed?	X			
		Were blanks analyzed at the appropriate frequency ?	X			
		Were method blanks taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures ?	X			
		Were Blank Concentrations <MQL?	X			
R6	OI	Laboratory Control Samples (LCS):				
		Were all COCs included in the LCS?	X			
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X			
		Were LCSs analyzed at the required frequency?	X			
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X			
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X			
		Was the LCSD RPD within the QC limits?	X			
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data				
		Were the project/method specified analytes included in the MS and MSD?	X			
		Were MS/MSD analyzed at the appropriate frequency?	X			
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X			
		Were MS/MSD RPDs within the laboratory QC limits?	X			
R8	OI	Analytical Duplicate Data				
		Were appropriate analytical duplicates analyzed for each matrix?	X			
		Were analytical duplicates analyzed at the appropriate frequency?	X			
		Were RPDs or relative standard deviations within the laboratory QC limits?	X			
R9	OI	Method Quantitation Limits (MQLs)				
		Are the MQLs for each method analyte included in the laboratory data package?	X			
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X			
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X			
R10	OI	Other Problems/Anomalies				
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X			
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X			
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X			

Attachment A (cont'd) : Laboratory Review Checklist: Reportable Data

Laboratory Name:		XENCO LABORATORIES	LRC Date :		26-SEP-18				
Project Name:		Chevron N. Eunice	Laboratory Job Number :		599188				
Reviewer Name:		KEB	Batch Number(s) :		3063679, 3063315, 3063196, 3063723, 3063644				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵		
S1	OI	Initial Calibration (ICAL)							
		Were response factors and/or relative response factors for each analyte within QC limits?	X						
		Were percent RSDs or correlation coefficient criteria met?	X						
		Was the number of standards recommended in the method used for all analytes?	X						
		Were all points generated between the lowest and the highest standard used to calculate the curve?	X						
		Are ICAL data available for all instruments used?	X						
		Has the initial calibration curve been verified using an appropriate second source standard?	X						
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and continuing calibration blank							
		Was the CCV analyzed at the method-required frequency?	X						
		Were percent differences for each analyte within the method-required QC limits?	X						
		Was the ICAL curve verified for each analyte?	X						
		Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	X						
S3	O	Mass Spectral Tuning							
		Was the appropriate compound for the method used for tuning?			X				
		Were ion abundance data within the method-required QC limits?			X				
S4	O	Internal Standard (IS)							
		Were IS area counts and retention times within the method-required QC limits?			X				
S5	OI	Raw Data (NELAC 5.5.10)							
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X						
		Were data associated with manual integrations flagged on the raw data?	X						
S6	O	Dual Column Confirmation							
		Did dual column confirmation results meet the method-required QC?			X				
S7	O	Tentatively Identified Compounds (TICs)							
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X				
S8	I	Interference Check Sample (ICS) Results							
		Were percent recoveries within method QC limits?	X						
S9	I	Serial Dilutions, Post Digestions Spikes, and Method of Standard Additions							
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X						
S10	OI	Method Detection Limit (MDL) Studies							
		Was a MDL study performed for each reported analyte?	X						
		Is the MDL either adjusted or supported by the analysis of DCSs?	X						
S11	OI	Proficiency Test Reports							
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X						
S12	OI	Standards Documentation							
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X						
S13	OI	Compound/Analyte Identification Procedures							
		Are the procedures for compound/analyte identification documented?	X						
S14	OI	Demonstration of Analyst Competency (DOC)							
		Was DOC conducted consistent with NELAC Chapter 5?	X						
		Is documentation of the analyst's competency up-to-date and on file?	X						
S15	OI	Verification/Validation Documentation for Methods (NELAC Chapter 5)							
		Are all methods used to generate the data documented, verified, and validated, where applicable?	X						
S16	OI	Laboratory Standard Operating Procedures (SOPs)							
		Are laboratory SOPs current and on file for each method performed?	X						

- Items identified by the letter "R" must be included in the laboratory data package submitted to the TCEQ-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Attachment A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: XENCO LABORATORIES	LRC Date: 26-SEP-18
Project Name: Chevron N. Eunice	Laboratory Job Number: 599188
Reviewer Name: KEB	Batch Number(s) : 3063679, 3063315, 3063196, 3063723, 3063644
ER# 1	DESCRIPTION

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No is checked on the LRC).



ARCADIS, Midland, TX

Chevron N. Eunice

Analytical Method: **Chloride by EPA 300**

Matrix: **Water**

Prep Method: **E300P**

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chloride	0.0858	0.500	0.250	0.177	mg/L

Analytical Method: **Chromium, Hexavalent by SW 7196A**

Matrix: **Water**

Prep Method:

Laboratory: **Xenco - Midland**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Chromium, Hexavalent	0.00273	0.0100	0.00800	0.00510	mg/L

Analytical Method: **Dissolved Metals by SW6020A**

Matrix: **Water**

Prep Method: **SW3010A**

Laboratory: **Xenco - Houston**

Parameter	SDL	MQL	Spike Amount	Actual Amount	Units
Arsenic	0.000246	0.00400	0.00200	0.00294	mg/L
Barium	0.000484	0.00400	0.00400	0.00401	mg/L
Chromium	0.000525	0.00400	0.00200	0.00400	mg/L



ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order # **599188**

Page **1** of **4**

Contact & Company Name: Brett Krehbiel Arcadis Address: 101 Creekside Ridge Court, Suite 200 City: Roseville State: CA Zip: 95678 Telephone: 916-786-0320 Fax: 916-786-0366 E-mail Address: brett.krehbiel@arcadis.com		Preservative Filtered (✓) # of Containers Container Information		Matrix Type (✓) Comp Grab	
Send Results to: Project Name/Location (City, State): Chevrone N. Eunice Sample's Printed Name: J. M. S. Hargrett		Collection Date Time		Matrix Type (✓) Comp Grab	
Sample ID		Collection		Matrix	
MW002A-W-180914		3/14/14 0944		R	
MW001A-W-180914		3/14/14 1014		X	
MW002A-W-180914		3/14/14 1034		X	
DUP-1-W-180914		3/14/14		X	
MW006A-W-180914		3/14/14 1113		X	
MW007-W-180914		3/14/14 0950		X	
MW008-W-180914		3/14/14 0950		X	
MW009SA-W-180914		3/14/14 0956		X	
MW004A-W-180914		3/14/14 0917		X	
DUP-1-W-180914		3/14/14		X	
TW023-W-180914		3/14/14 0850		X	
MW003SA-W-180914		3/14/14 0804		X	
Special Instructions/Comments: Temp. 5.3 R80.0					
☐ Special QA/QC Instructions (✓):					
Relinquished By Printed Name: Shawnne Comer Signature: [Signature] Firm: Arcadis Date/Time: 3/14/14 1514		Received By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]		Relinquished By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]	
Laboratory Information and Receipt Lab Name: Xenco Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact Sample Receipt: Condition/Cooler Temp: [Blank]		Relinquished By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]		Received By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]	
Shipping Tracking #: [Blank]		Relinquished By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]		Received By Printed Name: [Blank] Signature: [Blank] Firm: [Blank] Date/Time: [Blank]	

Inter-Office Shipment

IOS Number **114043**

Date/Time: 09/14/18 15:39

Created by: Shawnee Gomez

Please send report to: Kelsey Brooks

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave, Midland TX 79701

Lab# To: **Houston**

Air Bill No.: 773225421654

E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
599188-001	W	MW07A-W-180914	09/14/18 09:46	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-002	W	MW011A-W-180914	09/14/18 12:53	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-003	W	MW002A-W-180914	09/14/18 09:46	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-004	W	DUP-1-N-180914	09/14/18 10:18	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-005	W	MW016A-W-180914	09/14/18 10:34	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-006	W	MW047-W-180914	09/14/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-007	W	MW008-M-180914	09/14/18 11:13	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-008	W	MW089SA-W-180914	09/14/18 09:32	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-009	W	MW004A-W-180914	09/14/18 09:57	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-010	W	DUP-6-W-180914	09/14/18 09:26	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-011	W	IW023-W-180914	09/14/18 09:17	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	
599188-012	W	MW0935A-W-180914	09/14/18 00:00	SW6020_DIS	Dissolved Metals by SW6020A	09/20/18	03/13/19	KEB	AS BA CR	

Inter Office Shipment or Sample Comments:

Relinquished By:

Shawnee Gomez

Shawnee Gomez

Received By:

Rene Vandenberghe

Rene Vandenberghe

Date Relinquished: 09/14/2018

Date Received: 09/15/2018 09:30

Cooler Temperature: 3.2



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 114043

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou-068

Sent By: Shawnee Gomez

Date Sent: 09/14/2018 03:39 PM

Received By: Rene Vandenberghe

Date Received: 09/15/2018 09:30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

 Rene Vandenberghe

Date: 09/15/2018



Client: ARCADIS

Date/ Time Received: 09/14/2018 03:14:00 PM

Work Order #: 599188

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	5.3	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Stafford
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst: SG

PH Device/Lot#: 213315

Checklist completed by:

Shawnee Gomez

Date: 09/14/2018

Checklist reviewed by:

Kelsey Brooks

Date: 09/17/2018

APPENDIX E

Historical Analytical Data (through 2017)



Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
EPWW1	1/26/2006	N	--	< 0.02 U	--	0.125	--	< 0.02 U	--	0.475	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	79.6	449
	7/6/2006	N	--	< 0.02 U	--	0.0259	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	49.2	385
	4/6/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.251	0.251	< 1 U	< 1 U	< 1 U	< 3 U	0.52	< 0.05 U	255	914
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.062	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.093	< 0.05 U	67.6	408
	5/21/2012	N	< 0.0100 U	--	0.0475	--	--	0.968	0.301	--	0.0494	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	805	3,080
GOPWW2	1/19/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	10.3	0.787	0.787	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,000	1,930
	6/28/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.597	0.597	2	7.9	5.8	4.8	0.15	0.082	1,140	1,970
	4/23/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	6.3	0.26	0.26	2.7	< 1 U	1.5	--	< 0.098 U	< 0.05 U	1,130	--
	9/10/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	13.8	0.405	0.405	< 1 U	< 1 U	< 1 U	< 3 U	0.11	0.063	1,320	--
	3/24/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	5.39	0.559	0.559	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	2,130	3,680
	8/5/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	1.06	0.354	0.354	< 1 U	< 1 U	< 1 U	< 3 U	0.22	< 0.05 U	1,690	2,910
	3/17/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	2.18	0.513	0.513	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	1,600	2,260
	8/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.577	0.577	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1,420	3,060
	3/2/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	< 0.05 U	0.569	0.569	< 1 U	< 2 U	< 1 U	< 1 U	< 0.054 U	< 0.05 U	1,530	3,190
	8/3/2010	N	--	< 0.01 U	--	< 0.05 U	--	0.121	--	6.41	1.08	1.08	< 1 U	< 2 U	< 1 U	< 1 U	0.941	< 0.05 U	1,520	3,460
	5/8/2012	N	0.071	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	1.05	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,470	1,920
	11/1/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	17.2	1.8	1.8	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,420	2,930
	5/23/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	1.11	--	< 1.00 U	< 2.00 U	1.01	< 1.00 U	--	--	1350 E	3,070
	8/1/2002	N	--	< 0.01 U	3.6	3.31	3.41	--	--	--	--	--	< 2 U	2	< 2 U	< 2 U	< 0.27 U	< 0.05 U	1,160	4,720
	6/10/2003	N	--	< 0.05 U	4.1	3.99	3.91	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,800	--
6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,700	--	
7/1/2003	N	--	< 0.05 U	0.12	0.1	< 0.05 U	--	10	8.5	2.24	1.84	--	--	--	--	--	--	140	--	
7/9/2003	N	--	< 0.05 U	0.06	0.19	< 0.05 U	--	10.5	44	0.73	2.93	--	--	--	--	--	--	3,400	--	
7/15/2003	N	--	< 0.05 U	0.11	0.1	< 0.1 U < 1 U	--	31.6	30.8	2.21	2.11	--	--	--	--	--	--	2,600	--	
7/30/2003	N	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.02 U	--	41	43	1.8	1.9	--	--	--	--	--	--	2,000	--	
8/20/2003	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2003	N	--	< 0.05 U	1.53	0.65	< 0.1 U	--	235	244	6.2	6.43	--	--	--	--	--	--	2,800	--	
10/29/2003	N	--	< 0.5 U	0.32	0.38	< 0.005 U	--	256	279	5.61	6.09	--	--	--	--	--	--	2,300	--	
12/9/2003	N	--	< 0.05 U	0.32	0.32	< 0.01 U	--	242	244	6.36	6.42	--	--	--	--	--	--	1,400	--	
1/8/2004	N	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.005 U	--	89	91	4.4	4.5	--	--	--	--	--	--	1,300	24,500	
3/4/2004	N	--	< 0.05 U	0.26	0.33	< 0.05 U < 0.05 U	--	179	229	3.51	4.42	--	--	--	--	--	--	1,300	--	
4/1/2004	N	--	< 0.01 U	0.09	0.1	< 0.1 U	--	87.6	89.8	1.98	2.03	--	--	--	--	--	--	1,220	21,800	
5/17/2004	N	--	< 0.05 U	< 0.2 U	< 0.2 U	< 0.1 U	--	131	160	4	5	--	--	--	--	--	--	1,100	--	
6/10/2004	N	--	< 0.01 U	0.11	0.14	< 0.1 U	--	92.1	123	2.3	3.17	--	--	--	--	--	--	3,800	--	
7/14/2004	N	--	< 0.01 U	0.08	0.1	< 0.1 U	--	57.2	75.2	1.14	1.63	--	--	--	--	--	--	2,800	--	
8/1/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.1 U	--	28.2	30.2	0.85	0.98	--	--	--	--	--	--	2,100	--	
9/15/2004	N	--	< 0.05 U	< 0.2 U	< 0.2 U	< 0.1 U	--	114	115	2.8	2.9	--	--	--	--	--	--	1,320	--	
10/6/2004	N	--	< 0.1 U	0.06	< 0.5 U	< 0.005 U	--	96	97	1.41	1.8	--	--	--	--	--	--	880	--	
11/15/2004	N	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.1 U	--	110	116	0.16	0.51	--	--	--	--	--	--	1,030	20,600	
12/28/2004	N	--	< 0.1 U	0.1	0.1	< 0.005 U	--	--	172	4.5	3.7	--	--	--	--	--	--	1,070	--	
1/26/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	72.7	77.8	0.3	0.4	--	--	--	--	--	--	350	--	
2/9/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	73.6	50.4	0.3	0.2	--	--	--	--	--	--	400	--	
3/10/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.005 U	--	78.2	74.1	1	0.8	--	--	--	--	--	--	270	--	
4/12/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	92.8	98	1.3	1.4	--	--	--	--	--	--	250	--	
5/12/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	102	106	1.7	1.8	--	--	--	--	--	--	510	--	
6/9/2005	N	--	< 0.05 U	0.07	0.07	< 0.05 U	--	96.1	93.8	0.96	0.98	--	--	--	--	--	--	390	--	
7/7/2005	N	--	< 0.05 U	0.06	0.05	< 0.05 U	--	79.5	82.5	0.88	0.94	--	--	--	--	--	--	340	--	
2/6/2006	N	--	0.0274	--	< 0.015 U	--	< 2 U	--	145	3.49	3.49	< 25 U	< 25 U	< 25 U	< 75 U	< 600 U	< 600 U	146	8,350	
7/20																				

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
IW002	8/21/2003	N	--	< 0.05 U	0.19	0.13	< 0.005 U	--	165	176	5.27	5.59	--	--	--	--	--	--	1,500	--	
	9/30/2003	N	--	< 0.05 U	2.04	4.13	< 0.005 U	--	< 0.1 U	158	< 0.05 U	5.23	--	--	--	--	--	--	300	--	
	10/29/2003	N	--	< 0.05 U	0.11	0.11	< 0.005 U	--	207	208	5.9	5.93	--	--	--	--	--	--	1,600	--	
	12/10/2003	N	--	< 0.05 U	0.15	0.16	< 0.01 U	--	224	247	3.83	4.19	--	--	--	--	--	--	1,230	--	
	1/8/2004	N	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.005 U	--	113	118	3.1	3.2	--	--	--	--	--	--	1,150	17,900	
	2/23/2004	N	--	< 0.05 U	0.1	0.11	< 0.05 U	--	140	140	2.64	2.69	--	--	--	--	--	--	860	--	
	4/6/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	0.3	--	267	266	4	4	--	--	--	--	--	--	1,190	--	
	5/13/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	244	322	4.3	5.7	--	--	--	--	--	--	1,600	--	
	6/10/2004	N	--	< 0.01 U	0.07	0.09	< 0.1 U	--	105	133	2.33	2.99	--	--	--	--	--	--	1,200	--	
	7/8/2004	N	--	< 0.01 U	0.09	0.11	< 0.1 U	--	108	128	3.32	3.91	--	--	--	--	--	--	2,200	--	
	7/14/2004	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/16/2004	N	--	< 0.1 U	< 0.5 U	1.2	< 0.1 U	--	166	177	5.3	7	--	--	--	--	--	--	1,700	--	
	9/9/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--	6.1	6	0.2	0.2	--	--	--	--	--	--	640	--	
	10/7/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	112	118	1.6	1.7	--	--	--	--	--	--	1,640	--	
	11/11/2004	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	--	98.7	101	2.16	2.16	--	--	--	--	--	--	246	24,400	
	12/29/2004	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	--	170	172	5	5.2	--	--	--	--	--	--	1160	--	
	1/19/2005	N	--	< 0.01 U	0.4	0.04	< 0.01 U	--	81	82	3.1	0.32	--	--	--	--	--	--	380	--	
	1/27/2005	N	--	< 0.1 U	0.1	0.2	< 0.1 U	--	43.6	64.9	3.5	5.4	--	--	--	--	--	--	490	--	
	2/10/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	77.4	86.6	0.3	0.4	--	--	--	--	--	--	280	3,160	
	3/15/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	95	93.8	1.4	1.4	--	--	--	--	--	--	210	--	
	4/14/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	96.6	96.8	0.9	1	--	--	--	--	--	--	200	--	
	5/17/2005	N	--	< 0.1 U	< 0.1 U	1.1	< 0.05 U	--	150	153	1.9	1.9	--	--	--	--	--	--	390	--	
	6/15/2005	N	--	< 0.1 U	0.07	0.07	< 0.05 U	--	< 0.4 U	< 0.4 U	1.11	1.17	--	--	--	--	--	--	490	--	
	7/12/2005	N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	90	90.9	0.53	0.53	--	--	--	--	--	--	280	--	
	2/6/2006	N	--	0.0264	--	0.0166	--	< 2 U	--	265	4.62	4.62	30	< 20 U	< 20 U	< 20 U	< 60 U	< 600 U	< 600 U	126	6,750
	7/20/2006	N	--	0.0314	--	0.0154	--	< 0.02 U	--	365	4.58	4.58	< 10 U	< 10 U	< 10 U	< 50 U	< 960 U	6.6	133	11,200	
	4/11/2007	N	--	0.1	--	< 0.075 U	--	< 2 U	--	79.8	1.47	1.47	< 100 U	< 100 U	< 100 U	< 300 U	17	< 5 U	317	--	
	4/21/2008	N	--	< 0.10 U	--	< 0.075 U	--	< 2 U	--	37.8	1.04	1.04	< 20 U	< 20 U	< 20 U	< 60 U	310	< 0.1 U	371	5,700	
	4/6/2009	N	--	< 0.10 U	--	< 0.075 U	--	< 2 U	--	27.9	0.993	0.993	< 50 U	< 50 U	< 50 U	< 150 U	6	< 2.5 U	501	5,090	
	3/12/2010	N	--	< 0.50 U	--	< 0.50 U	--	< 0.61 U	--	--	3.62	< 0.5 U	< 0.5 U	< 1 U	< 1.4 U	< 1 U	< 1 U	1.83	< 0.05 U	183	2,920
	5/25/2012	N	< 0.0500 U	--	< 0.0500 U	--	--	0.462	5.21	--	0.818	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	547	4,430	
	5/22/2013	N	< 0.100 U	--	< 0.0500 U	--	--	< 0.200 U	4.97	--	0.863	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	534	3,880	
	5/28/2014	N	0.0105 J	--	0.00643 J	--	--	< 0.0500 U	3.29	--	0.737	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	582	3,850	
	5/22/2015	N	< 0.0200 U	--	0.00606 J	--	--	< 0.200 U	7.18	--	0.82	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	544	3,020	
	5/13/2016	N	0.029	--	0.0095 J	--	< 0.0548 U	--	--	--	--	--	--	--	--	--	--	--	538	3,230	
	5/5/2017	N	0.0172	--	0.0116	--	< 0.01 U	--	25.6	--	1.1	--	--	--	--	--	--	--	526	2,960	
IW003	12/17/2003	N	--	< 0.05 U	0.27	0.27	0.103	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,800	4,380	
	6/3/2004	N	--	< 0.01 U	0.11	0.13	< 0.1 U	--	30.8	32.8	33.3	36.8	--	--	--	--	--	--	3,100	--	
	7/8/2004	N	--	0.06	0.43	0.17	< 0.1 U	--	61.4	76.1	56.3	61.2	--	--	--	--	--	--	1,500	--	
	8/18/2004	N	--	< 0.01 U	0.15	0.16	< 0.1 U	--	69.5	75.6	27.7	31	--	--	--	--	--	--	2,300	--	
	10/11/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	187	149	64.4	51.1	--	--	--	--	--	--	1,600	--	
	1/6/2005	N	--	< 0.1 U	0.2	0.2	< 0.1 U	--	147	149	52.5	51	--	--	--	--	--	--	640	--	
	1/27/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	48.9	61.6	19.8	24	--	--	--	--	--	--	500	--	
	2/21/2005	N	--	< 0.1 U	0.1	0.2	< 0.02 U	--	80.8	107	25.8	33.9	--	--	--	--	--	--	660	--	
	3/17/2005	N	--	< 0.1 U	0.2	0.2	< 0.1 U	--	115	125	43	54.9	--	--	--	--	--	--	550	--	
	4/19/2005	N	--	< 0.1 U	0.2	0.2	< 0.02 U	--	91.7	91.9	37.5	37.5	--	--	--	--	--	--	560	--	
	6/1/2005	N	--	< 0.05 U	0.09	0.1	< 0.05 U	--	79	91.3	35.8	41.9	--	--	--	--	--	--	460	--	
	6/21/2005	N	--	< 0.05 U	0.16	0.07	< 0.05 U	--	74.3	104	37	40.3	--	--	--	--	--	--	650	--	
	7/21/2005	N	--	< 0.05 U	0.1	0.1	< 0.05 U	--	82.5	83.3	16.8	17.2	--	--	--	--	--	--	600	--	
	2/6/2006	N	--	0.278	--	0.136	--	< 2 U	--	158	48.5	48.5	< 100 U	< 100 U	< 100 U	< 300 U	< 1200 U	< 5000 U	1,100	34,600	
	2/6/2006	FD	--	0.278	--	0.135	--	< 2 U	--	155	47.9	47.9	< 100 U	< 100 U	< 100 U	< 300 U	< 1				

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
IW004	1/27/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	50.4	53.9	10.8	11	--	--	--	--	--	--	310	--
	2/22/2005	N	--	< 0.1 U	0.1	0.1	< 0.1 U	--	97.7	99.4	22.4	22.9	--	--	--	--	--	--	660	--
	3/21/2005	N	--	< 0.1 U	< 0.1 U	0.1	< 0.05 U	--	88.8	133	24.8	43.9	--	--	--	--	--	--	350	--
	4/19/2005	N	--	< 0.1 U	0.1	0.1	< 0.02 U	--	109	109	33	32.8	--	--	--	--	--	--	590	--
	6/1/2005	N	--	< 0.05 U	0.06	0.09	< 0.05 U	--	66	112	18.2	38.7	--	--	--	--	--	--	470	--
	6/21/2005	N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	47.2	54.1	13.1	18.1	--	--	--	--	--	--	510	--
	7/21/2005	N	--	< 0.05 U	0.1	0.1	< 0.05 U	--	67	71.2	22.6	24	--	--	--	--	--	--	730	--
	2/6/2006	N	--	0.0547	--	0.0693	--	< 2 U	--	42.9	8.19	8.19	< 25 U	< 25 U	< 25 U	< 75 U	< 600 U	< 800 U	1,430	16,300
	7/25/2006	N	--	0.0618	--	0.0216	--	< 2 U	--	1.92	16.7	16.7	< 10 U	< 10 U	< 10 U	< 30 U	440	1.6	1,320	7,590
	4/9/2007	N	--	0.0612	--	0.0176	--	< 0.2 U	--	4.09	6.84	6.84	< 5 U	< 5 U	< 5 U	< 15 U	0.72	< 0.25 U	1,400	--
	4/3/2008	N	--	0.0218	--	< 0.015 U	--	--	--	< 0.2 U	5.85	5.85	< 5 U	< 5 U	< 5 U	< 15 U	0.35	< 0.25 U	1,610	3,960
	3/23/2009	N	--	< 0.02 U	--	0.0182	--	< 0.02 U	--	< 0.2 U	3.83	3.83	< 1 U	< 1 U	< 1 U	< 3 U	0.39	< 0.05 U	1,570	4,490
	3/4/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.218	1.68	1.68	< 1 U	< 1 U	< 1 U	< 1 U	--	< 0.05 U	1,760	4,100
	3/17/2010	N	--	--	--	--	--	--	--	--	--	--	--	< 2.00 U	--	--	0.147	--	--	--
	5/11/2012	N	< 0.0100 U	--	0.0128	--	--	0.0125	0.227	--	3.88	--	< 1.00 U	--	< 1.00 U	< 1.00 U	--	--	1190 J	4,390
	5/20/2014	N	< 0.0200 U	--	0.0108	--	--	< 0.0500 U	< 0.200 U	--	3.47	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	972	3,160
	5/12/2015	N	< 0.0200 U	--	0.0173	--	--	< 0.0500 U	< 0.200 U	--	4.17	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,010	3,090
	5/17/2016	N	0.00499 J	--	0.0138	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	904	2,520
	5/8/2017	N	0.00202	--	0.0123	--	< 0.01 U	--	1.68	--	3.97	--	--	--	--	--	--	--	1,000	2,620
	IW005	12/18/2003	N	--	--	0.2	--	0.14	--	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	620
2/25/2004		N	--	< 0.05 U	--	0.19	--	--	--	0.9	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	--	--
6/9/2004		N	--	< 0.01 U	0.11	0.12	< 0.1 U	--	55	61.2	15.1	16.8	--	--	--	--	--	--	1,920	--
7/8/2004		N	--	< 0.01 U	0.1	0.12	< 0.1 U	--	55.1	64.3	7.63	9.3	--	--	--	--	--	--	2,100	--
8/18/2004		N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/11/2004		N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	148	170	12.1	11.1	--	--	--	--	--	--	1,340	--
12/1/2004		N	--	< 0.01 U	0.52	0.51	< 0.005 U	--	196	226	18.4	22.8	--	--	--	--	--	--	1,160	25,000
1/6/2005		N	--	< 0.1 U	0.4	0.4	< 0.1 U	--	170	163	12.8	11.7	--	--	--	--	--	--	490	--
1/27/2005		N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	24.4	34.2	1.4	2.1	--	--	--	--	--	--	190	--
2/22/2005		N	--	< 0.1 U	0.3	0.3	< 0.1 U	--	118	111	7.8	7.4	--	--	--	--	--	--	430	--
3/21/2005		N	--	< 0.1 U	0.1	0.1	< 0.05 U	--	66.4	60.5	4.5	6	--	--	--	--	--	--	270	--
4/20/2005		N	--	< 0.1 U	0.1	0.1	< 0.05 U	--	68.7	64.1	5.3	6.1	--	--	--	--	--	--	270	--
6/1/2005		N	--	< 0.05 U	0.18	0.2	< 0.05 U	--	85.6	101	6.07	8.15	--	--	--	--	--	--	330	--
6/22/2005		N	--	< 0.05 U	0.11	0.09	< 0.05 U	--	60	56.9	3.24	3.75	--	--	--	--	--	--	370	--
7/13/2005		N	--	< 0.1 U	0.4	0.3	< 0.05 U	--	129	95.3	5.7	3.9	--	--	--	--	--	--	430	--
2/6/2006		N	--	0.0595	--	0.591	--	< 2 U	--	197	15.6	15.6	< 100 U	< 100 U	< 100 U	< 300 U	< 1200 U	< 3000 U	781	24,500
7/26/2006		N	--	0.096	--	0.252	--	< 2 U	--	49.3	19	19	< 10 U	< 10 U	< 10 U	< 30 U	1500	24	887	14,300
3/27/2007		N	--	0.272	--	0.135	--	< 2 U	--	13.8	3.14	3.14	< 100 U	< 100 U	< 100 U	< 300 U	3600	5000	964	--
4/12/2007		N	--	0.329	--	0.102	--	< 2 U	--	6.33	2.15	2.15	< 100 U	< 100 U	< 100 U	< 300 U	3.6	< 5 U	1,210	--
4/1/2008		N	--	0.154	--	0.0781	--	< 1 U	--	23.5	4.69	4.69	< 5 U	< 5 U	< 5 U	< 15 U	3.2	< 0.25 U	1,140	4,890
3/23/2009		N	--	0.0971	--	0.0311	--	< 0.2 U	--	6.21	1.8	1.8	< 5 U	< 5 U	< 5 U	< 15 U	1.5	< 0.25 U	1,690	4,790
3/4/2010		N	--	< 0.5 U	--	< 0.50 U	--	0.148	--	8.16	5.98	5.98	< 1 U	1.4	< 1 U	< 1 U	--	< 0.05 U	1,010	3,860
3/16/2010		N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.704	--	--	--
5/11/2012		N	< 0.0100 U	--	0.0162	--	--	0.109	3.25	--	3.78	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	990 J	3,920
5/7/2013		N	0.0165 J	--	0.0129	--	--	< 0.0100 U	1.61	--	1.07	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	860	2,990
5/16/2014		N	0.00973 J	--	0.0109	--	--	< 0.0100 U	0.822	--	2.16	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	850	2,830
5/19/2015		N	0.0124 J	--	0.0119	--	--	< 0.0500 R	0.623 J	--	2.92	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	904	3,210
5/17/2016		N	0.0267	--	0.0119	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	782	3,220
5/17/2016		FD	0.0212	--	0.0122	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	732	2,820
5/8/2017		N	0.0186	--	0.0124	--	< 0.01 U	--	10.9	--	2.73	--	--	--	--	--	--	--	822	2,400
IW006	12/18/2003	N	--	< 0.05 U	--	0.06	0.03	--	--	1.7	0.07	0.07	--	--	--	--	--	--	550	1,640
	2/25/2004	N	--	--	0.07	--	--	--	<											

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	4/12/2007	N	--	0.16	--	0.04	--	< 2 U	--	10.1	3.6	3.6	< 100 U	< 100 U	< 100 U	< 300 U	2.1	< 5 U	900	--	
	4/1/2008	N	--	0.129	--	0.0287	--	< 1 U	--	8.04	6.46	6.46	< 5 U	< 5 U	< 5 U	< 15 U	1.4	0.31	1,000	3,660	
	3/19/2009	N	--	0.0761	--	0.016	--	< 1 U	--	6.9	5.59	5.59	< 5 U	< 5 U	< 5 U	< 15 U	0.67	< 0.25 U	915	3,400	
	3/4/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.065	--	1.67	4.69	4.69	< 1 U	< 1 U	< 1 U	< 1 U	--	< 0.05 U	887	3,640	
	3/16/2010	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.206	--	--	--	
	5/11/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	0.0276	0.96	--	2.5	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	835 J	3,530	
	5/7/2013	N	< 0.0200 U	--	0.00531 J	--	--	< 0.0100 U	0.513	--	1.32	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	798	2,920	
	5/16/2014	N	0.0197 J	--	0.00793 J	--	--	< 0.0100 U	1.19	--	4.58	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	794	2,790	
	5/19/2015	N	0.0317	--	0.00717 J	--	--	< 0.0100 R	0.598 J	--	5.02	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	835	3,630	
5/17/2016	N	0.0254	--	0.0077 J	--	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	716	2,400		
5/8/2017	N	0.0196	--	0.00869	--	< 0.01 U	--	3.93	--	4.15	--	--	--	--	--	--	--	741	2,150		
IW007	12/18/2003	N	--	< 0.05 U	--	< 0.05 U	< 0.005 U	--	--	3.8	0.05	0.05	--	--	--	--	--	--	--	--	
	2/26/2004	N	--	< 0.01 U	--	< 0.01 U	--	--	--	0.73	0.01	0.01	< 2 U	< 2 U	< 2 U	< 6 U	< 0.3 U	< 0.05 U	840	2,120	
	6/9/2004	N	--	< 0.01 U	0.07	0.08	< 0.1 U	--	31.7	39.9	6.01	7.56	--	--	--	--	--	--	1630	--	
	7/20/2004	N	--	< 0.01 U	0.1	0.11	< 0.1 U	--	68.4	74.6	13.5	15.1	--	--	--	--	--	--	2300	--	
	8/19/2004	N	--	< 0.01 U	0.14	0.13	< 0.1 U	--	108	96.2	7.61	7.15	--	--	--	--	--	--	2500	--	
	10/13/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.005 U	--	186	217	11.1	11.2	--	--	--	--	--	--	1590	--	
	12/2/2004	N	--	< 0.1 U	0.2	0.2	< 0.005 U	--	152	181	16.8	15.8	--	--	--	--	--	--	1370	27,100	
	1/10/2005	N	--	< 0.1 U	0.1	0.1	< 0.005 U	--	141	137	7.4	7.6	--	--	--	--	--	--	510	--	
	1/31/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	74	95.8	4.6	6.2	--	--	--	--	--	--	300	--	
	2/22/2005	N	--	< 0.1 U	0.1	0.1	< 0.1 U	--	154	160	11.3	11.9	--	--	--	--	--	--	450	--	
	3/22/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	4/20/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	100	105	7.8	8.2	--	--	--	--	--	--	300	--	
	5/31/2005	N	--	< 0.1 U	0.3	< 0.1 U	< 0.05 U	--	144	122	23.2	9.9	--	--	--	--	--	--	420	--	
	6/22/2005	N	--	< 0.05 U	0.06	0.07	< 0.05 U	--	74.6	84.2	5.26	5.95	--	--	--	--	--	--	470	--	
	7/13/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	90.8	90.7	5.5	5.5	--	--	--	--	--	--	540	--	
	2/7/2006	N	--	0.125	--	0.185	--	< 2 U	--	213	21.5	21.5	< 100 U	< 100 U	< 100 U	< 300 U	< 1200 U	< 5000 U	572	49,600	
	7/26/2006	N	--	0.0599	--	0.118	--	< 2 U	--	44.9	16.2	16.2	< 25 U	< 25 U	< 25 U	< 75 U	3600	21	527	26,800	
	3/26/2007	N	--	0.0622	--	0.171	--	< 2 U	--	69.3	27.5	27.5	< 100 U	< 100 U	< 100 U	< 300 U	3600	13	637	--	
	4/1/2008	N	--	0.0464	--	0.114	--	< 2 U	--	93.5	31.8	31.8	< 10 U	< 10 U	< 10 U	< 30 U	3000	8.3	714	26,300	
	3/19/2009	N	--	0.299	--	0.0706	--	< 2 U	--	14	2.03	2.03	6.9	< 5 U	< 5 U	< 15 U	6.6	0.4	880	5,550	
	3/4/2010	N	--	< 0.5 U	--	< 0.50 U	--	0.469	--	23.4	5.83	5.83	< 1 U	1.4	1.1	< 1 U	2.46	< 0.05 U	821	4,500	
	5/15/2012	N	0.131 J	--	0.036	--	--	0.67	15.3	--	4.43	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	884 J	4,200	
	5/7/2013	N	0.107	--	0.0444 J	--	--	< 0.0100 U	10.2	--	3.98	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	861	4,050	
	5/29/2014	N	0.0423	--	0.0253	--	--	< 0.100 U	9.32	--	4.25	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	835	4,490	
	5/19/2015	N	0.0404	--	0.0223	--	--	< 0.0500 R	7.15 J	--	4.61	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	870	4,140	
	5/17/2016	N	0.122	--	0.0402	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	829	3,350	
	5/8/2017	N	0.0843	--	0.0192	--	< 0.01 U	--	17.1	--	3.93	--	--	--	--	--	--	--	893	2,570	
	IW008	2/26/2004	N	--	< 0.01 U	< 0.05 U	0.02	< 0.005 U	--	< 0.1 U	10.3	< 0.05 U	0.18	--	--	--	--	--	--	210	880
		6/9/2004	N	--	< 0.01 U	0.06	0.07	< 0.1 U	--	35.3	37.2	6.07	6.56	--	--	--	--	--	--	1,010	--
7/20/2004		N	--	< 0.01 U	0.16	0.18	< 0.1 U	--	87.3	96.1	13.2	16	--	--	--	--	--	--	1,800	--	
8/19/2004		N	--	< 0.01 U	0.06	0.07	< 0.1 U	--	59.9	65.6	5.36	6.57	--	--	--	--	--	--	1,200	--	
10/13/2004		N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.005 U	--	135	221	6.1	10.3	--	--	--	--	--	--	1,090	--	
12/2/2004		N	--	< 0.1 U	0.1	0.1	0.036	--	127	134	10.8	10.5	--	--	--	--	--	--	730	14,400	
1/11/2005		N	--	< 0.1 U	0.1	< 0.1 U	< 0.1 U	--	105	106	7.4	7.5	--	--	--	--	--	--	490	--	
2/2/2005		N	--	< 0.1 U	1.2	1.6	< 0.05 U	--	110	227	5.6	11.8	--	--	--	--	--	--	260	--	
2/23/2005		N	--	< 0.1 U	0.1	0.1	< 0.1 U	--	137	141	6	5.8	--	--	--	--	--	--	370	--	
3/22/2005		N	--	< 0.1 U	< 0.1 U	0.1	< 0.005 U	--	93.6	121	3.3	4.4	--	--	--	--	--	--	230	--	
4/25/2005		N	--	< 0.01 U	0.11	0.11	< 0.05 U	--	113	114	3.93	4.01	--	--	--	--	--	--	240	--	
5/31/2005		N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	--	95.7	98.1	4.1	4	--	--	--	--	--	--	260	--	
6/22/2005		N	--	< 0.05 U	0.05	0.06	< 0.05 U	--	58.1	68.9	1.87	2.2	--	--	--	--					

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
IW009	6/9/2004	N	--	< 0.01 U	0.1	0.11	< 0.1 U	--	80	107	8.29	10.1	--	--	--	--	--	--	2,250	--
	7/20/2004	N	--	< 0.01 U	0.1	0.13	< 0.1 U	--	118	165	12.6	15.9	--	--	--	--	--	--	2,600	--
	8/19/2004	N	--	< 0.01 U	0.07	0.08	< 0.1 U	--	80.9	88.3	2.82	3.74	--	--	--	--	--	--	1,800	--
	10/14/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.005 U	--	238	236	15.5	15.2	--	--	--	--	--	--	1,730	--
	12/6/2004	N	--	< 0.1 U	0.18	0.24	< 0.05 U	--	263	350	17.4	23.3	--	--	--	--	--	--	1,500	35,800
	1/11/2005	N	--	< 0.1 U	0.2	0.2	< 0.1 U	--	222	230	12.7	13.1	--	--	--	--	--	--	810	--
	2/2/2005	N	--	< 0.01 U	2.2	0.11	< 0.05 U	--	457	26	23.7	1.36	--	--	--	--	--	--	590	--
	2/23/2005	N	--	< 0.1 U	0.1	0.1	< 0.1 U	--	196	205	10.2	9.4	--	--	--	--	--	--	580	--
	3/23/2005	N	--	< 0.1 U	0.1	0.1	< 0.005 U	--	249	247	12.7	12.7	--	--	--	--	--	--	480	--
	4/25/2005	N	--	< 0.01 U	0.11	0.12	< 0.05 U	--	162	181	8.94	9.66	--	--	--	--	--	--	510	--
	5/31/2005	N	--	< 0.1 U	0.2	0.2	< 0.05 U	--	182	193	9.7	10.3	--	--	--	--	--	--	430	--
	6/23/2005	N	--	< 0.05 U	0.08	0.09	< 0.05 U	--	145	150	7.79	8.12	--	--	--	--	--	--	580	--
	7/13/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	120	114	6.6	6.2	--	--	--	--	--	--	680	--
	2/7/2006	N	--	0.138	--	0.121	--	< 2 U	--	180	18.1	18.1	< 100 U	< 100 U	< 100 U	< 300 U	< 1200 U	< 4000 U	606	59,500
	7/27/2006	N	--	0.0982	--	0.0557	--	< 2 U	--	79.8	13.3	13.3	< 25 U	< 25 U	< 25 U	< 75 U	2100	3.9	434	18,100
	3/23/2007	N	--	--	--	--	--	< 0.4 U	--	--	--	--	< 25 U	< 1 U	4.8	< 10 U	< 5000 U	14	--	--
	3/31/2008	N	--	0.0562	--	0.0438	--	--	--	52.6	24.3	24.3	< 10 U	< 5 U	< 5 U	< 15 U	--	6	694	20,000
	3/19/2009	N	--	< 0.1 U	--	< 0.075 U	--	--	--	46.1	25.9	25.9	12	< 10 U	5.9	< 30 U	--	3.4	--	--
	3/4/2010	N	--	< 0.5 U	--	< 0.50 U	--	0.586	--	34.1	36.9	36.9	2.1	< 1 U	< 1 U	< 1 U	--	0.785	1,000	17,500
	5/20/2014	N	0.0186 J	--	0.00746 J	--	--	< 0.0500 U	1.61	--	5.23	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	709	4,350
IW010	12/18/2003	N	--	< 0.05 U	--	0.09	0.05	--	--	2	0.05	0.05	--	--	--	--	--	--	330	2,780
	2/26/2004	N	--	< 0.01 U	0.13	0.14	--	--	0.9	6.04	0.06	0.12	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	--	--
	6/9/2004	N	--	< 0.01 U	0.08	0.09	< 0.1 U	--	25.4	27.2	42.2	46	--	--	--	--	--	--	2,050	--
	7/21/2004	N	--	< 0.01 U	0.14	0.17	< 0.1 U	--	--	67.3	91.5	105	--	--	--	--	--	--	2,300	--
	8/19/2004	N	--	< 0.01 U	0.27	0.23	< 0.1 U	--	160	138	68.9	58.6	--	--	--	--	--	--	2,300	--
	10/14/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.005 U	--	348	354	< 0.5 U	< 0.5 U	--	--	--	--	--	--	2,000	--
	12/7/2004	N	--	< 0.05 U	0.71	0.79	< 0.05 U	--	551	580	224	236	--	--	--	--	--	--	1,930	--
	1/11/2005	N	--	< 0.1 U	0.4	0.4	< 0.1 U	--	343	344	133	134	--	--	--	--	--	--	1,510	--
	2/2/2005	N	--	< 0.1 U	1.9	2.1	< 0.05 U	--	655	639	14.1	13.8	--	--	--	--	--	--	1,380	--
	2/24/2005	N	--	< 0.1 U	0.3	0.4	< 0.1 U	--	279	397	102	147	--	--	--	--	--	--	1,400	--
	2/25/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/23/2005	N	--	< 0.1 U	0.4	0.4	< 0.005 U	--	355	352	< 0.1 U	< 0.1 U	--	--	--	--	--	--	1,110	--
	4/25/2005	N	--	< 0.01 U	0.43	0.44	< 0.05 U	--	359	359	125	125	--	--	--	--	--	--	1,190	--
	5/31/2005	N	--	< 0.1 U	0.5	1.5	< 0.05 U	--	306	622	101	< 0.1 U	--	--	--	--	--	--	1,140	--
	6/23/2005	N	--	< 0.05 U	0.37	0.42	< 0.05 U	--	312	353	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,120	--
	7/13/2005	N	--	< 0.1 U	0.4	0.4	< 0.05 U	--	368	355	84.5	81.4	--	--	--	--	--	--	940	--
	2/7/2006	N	--	0.0906	--	0.11	--	< 2 U	--	117	42.4	42.4	< 100 U	< 100 U	< 100 U	< 300 U	< 1200 U	< 2000 U	970	12,500
	7/27/2006	N	--	0.0605	--	0.0236	--	< 2 U	--	5.43	9.86	9.86	< 25 U	< 25 U	< 25 U	< 75 U	1.2	< 1.3 U	971	3,990
	3/23/2007	N	--	0.397	--	0.0198	--	0.2	--	15.3	10.9	10.9	< 5 U	< 1 U	< 1 U	< 3 U	0.65	< 0.05 U	1,020	--
	3/31/2008	N	--	0.0411	--	< 0.015 U	--	< 0.5 U	--	17.4	11	11	< 5 U	< 5 U	< 5 U	< 15 U	< 0.19 U	< 0.025 U	1,130	2,860
3/19/2009	N	--	0.0208	--	< 0.015 U	--	< 0.02 U	--	18.1	11.7	11.7	< 5 U	< 5 U	< 5 U	< 15 U	0.12	< 0.250 U	1,150	3,290	
3/4/2010	N	--	0.074	--	< 0.050 U	--	< 0.050 U	--	6.88	11.4	11.4	< 1 U	< 1 U	< 1 U	< 1 U	0.126	0.33	1,100	3,180	
5/15/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	0.0257	1.86	--	10.1	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	1090 J	3,960	
5/7/2013	N	< 0.0200 U	--	0.00403 J	--	--	< 0.0100 U	0.0813 J	--	9.17	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,040	3,350	
5/19/2014	N	< 0.0200 U	--	0.00147 J	--	--	< 0.0500 U	< 0.200 U	--	10.1	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,030	3,310	
5/18/2015	N	0.00921 J	--	0.00158 J	--	--	< 0.0100 R	0.453 J	--	10.1	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,030	3,590	
5/17/2016	N	0.0164	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	--	884	3,150
5/8/2017	N	0.00571	--	< 0.004 U	--	0.0062 J	--	11	--	7.31	--	--	--	--	--	--	--	--	913	3,080
3/22/2018	Reg	--	0.00789	--	0.00191 J	--	< 0.0100 U	8.83	--	--	5.01	--	--	--	--	--	--	--	906	2,940
IW011	12/18/2003	N	--	< 0.05 U	< 0.05 U	< 0.05 U	0.032	--	< 0.1 U	2	< 0.05 U	< 0.5 U	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,050	2,960
	6/8/2004	N	--	< 0																

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	3/4/2010	N	--	< 0.5 U	--	< 0.500 U	--	0.147	--	7.14	3.2	3.2	< 1 U	< 1 U	< 1 U	< 1 U	0.997	0.188	999	3,800
	5/15/2012	N	0.0363 J	--	< 0.0100 U	--	--	0.0807	1.7	--	1.48	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	986 J	3,380
	5/7/2013	N	0.0457	--	< 0.0100 U	--	--	< 0.0100 U	0.765	--	0.99	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,000	3,390
	5/19/2014	N	0.0337	--	0.00380 J	--	--	< 0.0500 U	0.818	--	1.02	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	970	3,200
	5/18/2015	N	0.0419	--	0.00376 J	--	--	< 0.0100 R	1.07 J	--	1.43	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,060	3,530
	5/17/2016	N	0.00574 J	--	0.00301 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	894	2,700
	5/8/2017	N	0.00779	--	< 0.004 U	--	< 0.01 U	--	0.173	--	0.588	--	--	--	--	--	--	--	993	2,780
	6/8/2004	N	--	< 0.01 U	0.06	0.08	< 0.1 U	--	42.6	51.3	7.97	9.97	--	--	--	--	--	--	2,300	--
IW012	8/19/2004	N	--	< 0.01 U	0.07	0.06	< 0.1 U	--	73.9	69.5	0.61	1.1	--	--	--	--	--	--	1,600	--
	10/14/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.005 U	--	65	91	3.6	4.6	--	--	--	--	--	--	1,020	--
	2/3/2005	N	--	< 0.1 U	0.1	0.2	< 0.1 U	--	182	280	9.7	15	--	--	--	--	--	--	430	--
	3/30/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	105	110	3.4	3.6	--	--	--	--	--	--	--	--
	6/23/2005	N	--	< 0.05 U	< 0.05 U	0.05	< 0.05 U	--	52.4	56.2	2.23	2.4	--	--	--	--	--	--	--	--
	7/14/2005	N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	--	68.6	65.7	2.6	2.6	--	--	--	--	--	--	380	--
	5/17/2016	N	0.0187	--	0.0148	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	809	3,420
	5/8/2017	N	0.0103	--	0.0126	--	< 0.01 U	--	2.55	--	0.32	--	--	--	--	--	--	--	952	3,320
IW013	2/10/2004	N	--	< 0.05 U	0.15	0.15	0.103	--	< 0.1 U	2.6	< 0.05 U	0.09	< 2 U	3	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,080	2,710
	6/8/2004	N	--	< 0.01 U	0.3	0.3	< 0.1 U	--	13.6	14.4	7.51	7.7	--	--	--	--	--	--	2,700	--
	7/21/2004	N	--	< 0.01 U	0.38	0.45	9	--	58	63.8	11.5	12.9	--	--	--	--	--	--	2,000	--
	8/19/2004	N	--	< 0.01 U	0.18	0.19	< 0.1 U	--	75.5	78.3	6.96	7.54	--	--	--	--	--	--	1,300	--
	10/19/2004	N	--	< 0.01 U	0.6	0.75	< 0.005 U	--	265	360	15.1	19.5	--	--	--	--	--	--	1,620	--
	12/7/2004	N	--	< 0.05 U	0.7	1.29	< 0.05 U	--	301	< 0.4 U	25.2	44.6	--	--	--	--	--	--	1,640	--
	1/12/2005	N	--	< 0.1 U	0.7	0.7	< 0.1 U	--	318	309	17.9	18.5	--	--	--	--	--	--	900	--
	2/3/2005	N	--	< 0.1 U	0.7	1	< 0.1 U	--	341	476	15.6	22	--	--	--	--	--	--	570	--
	2/24/2005	N	--	< 0.1 U	0.5	0.6	< 0.1 U	--	270	334	10.9	13.5	--	--	--	--	--	--	670	--
	3/24/2005	N	--	< 0.1 U	0.5	0.5	< 0.005 U	--	282	295	12.2	12	--	--	--	--	--	--	430	--
	4/26/2005	N	--	< 0.1 U	0.7	0.7	< 0.05 U	--	349	359	12.3	12.7	--	--	--	--	--	--	540	--
	5/25/2005	N	--	< 0.01 U	0.32	0.04	< 0.05 U	--	< 0.4 U	21.1	< 0.01 U	0.76	--	--	--	--	--	--	340	--
	6/23/2005	N	--	< 0.05 U	0.39	0.42	< 0.05 U	--	222	236	7.76	8.25	--	--	--	--	--	--	510	--
	7/14/2005	N	--	< 0.1 U	0.5	0.5	< 0.05 U	--	264	254	6.5	6.2	--	--	--	--	--	--	540	--
	2/8/2006	N	--	0.0405	--	0.418	--	< 2 U	--	295	6.79	6.79	< 100 U	< 100 U	< 100 U	< 300 U	< 600 U	< 1000 U	1,160	26,400
	2/8/2006	FD	--	0.0424	--	0.411	--	< 2 U	--	291	6.74	6.74	< 100 U	< 100 U	< 100 U	< 300 U	< 600 U	< 2000 U	988	22,100
	7/27/2006	N	--	0.033	--	0.0585	--	< 2 U	--	47.7	1.35	1.35	< 25 U	< 25 U	< 25 U	< 75 U	190	< 1.3 U	952	4,730
	7/27/2006	FD	--	0.0325	--	0.0592	--	< 2 U	--	49	1.38	1.38	< 25 U	< 25 U	< 25 U	< 75 U	220	< 1.3 U	965	4,710
	3/22/2007	N	--	0.0342	--	0.0311	--	< 1 U	--	10.1	1.03	1.03	< 2 U	< 1 U	2.7	< 20 U	390	0.86	890	--
	3/26/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.2 U	--	0.247	0.315	0.315	< 5 U	< 5 U	< 5 U	< 15 U	0.69	< 0.025 U	1,050	2,810
	3/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.282	0.282	< 1 U	< 1 U	< 1 U	< 3 U	0.12	< 0.050 U	1,020	2,960
	3/5/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.323	0.291	0.291	< 1 U	< 1 U	< 1 U	< 1 U	0.086	< 0.050 U	976	3,180
	5/15/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	0.0116	0.301	--	0.22	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	1060 J	3,780
	5/13/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	0.398	--	0.226	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,030	3,120
	5/19/2014	N	0.00915 J	--	0.00443 J	--	--	< 0.0500 U	< 0.200 U	--	0.221	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,100	2,990
	5/18/2015	N	0.00657 J	--	0.00347 J	--	--	< 0.0100 R	< 0.200 UJ	--	0.162	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,010	3,440
	5/17/2016	N	0.00879 J	--	0.00368 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	985	3,110
	5/8/2017	N	0.00494	--	0.00637	--	< 0.01 U	--	0.839	--	0.18	--	--	--	--	--	--	--	2,180	5,430
IW014	2/11/2004	N	--	< 0.05 U	< 0.05 U	< 0.05 U	0.007	--	< 0.1 U	1.3	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,400	3,810
	6/10/2004	N	--	< 0.01 U	0.06	0.07	< 0.1 U	--	44	67	2.98	5.2	--	--	--	--	--	--	1,800	--
	7/21/2004	N	--	< 0.01 U	< 0.05 U	0.08	< 0.1 U	--	126	151	5.85	7.11	--	--	--	--	--	--	1,800	--
	8/19/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.1 U	--	38.4	35	0.69	0.9	--	--	--	--	--	--	900	--
	10/19/2004	N	--	< 0.1 U	0.9	0.9	< 0.005 U	--	1190	1160	63.3	62.3	--	--	--	--	--	--	1,140	--
	12/7/2004	N	--	< 0.05 U																

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	5/15/2012	FD	0.0620 J	--	< 0.0200 U	--	--	0.558	1.9	--	0.345	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	1140 J	3,520	
	5/6/2013	N	0.144	--	0.0731	--	--	< 0.100 U	2.19	--	0.785	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,080	3,190	
	5/19/2014	N	0.0508	--	0.0128	--	--	< 0.0500 U	< 0.200 U	--	0.277	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,040	3,380	
	5/19/2015	N	0.0611	--	0.0121	--	--	< 0.0500 R	2.38 J	--	0.293	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,350	3,600	
	5/17/2016	N	0.0522	--	0.00898 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	1,150	3,460	
	5/8/2017	N	0.0346	--	0.00776	--	< 0.01 U	--	0.0237	--	0.2	--	--	--	--	--	--	--	1,400	3,380	
IW015	2/25/2004	N	--	< 0.05 U	0.22	0.24	0.18	--	< 0.1 U	6.5	< 0.05 U	0.19	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,300	--	
	6/3/2004	N	--	< 0.01 U	0.09	0.1	< 0.1 U	--	18.5	21.7	6.14	7.27	--	--	--	--	--	--	1,700	--	
	7/8/2004	N	--	< 0.01 U	0.19	0.27	0.3	--	64.5	76.4	9.32	11.3	--	--	--	--	--	--	2,200	--	
	8/18/2004	N	--	< 0.01 U	0.15	0.15	< 0.1 U	--	52.1	51.7	3.11	2.91	--	--	--	--	--	--	1,700	--	
	10/11/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	129	121	12.3	11.6	--	--	--	--	--	--	1,990	--	
	1/5/2005	N	--	< 0.1 U	0.02	0.3	0.01	--	79.7	86.2	0.33	7.1	--	--	--	--	--	--	1,070	--	
	2/21/2005	N	--	< 0.1 U	0.2	0.3	< 0.02 U	--	53.1	77.8	5.6	8.4	--	--	--	--	--	--	630	--	
	3/17/2005	N	--	< 0.1 U	0.2	0.2	< 0.1 U	--	56.2	55.3	3.8	3.8	--	--	--	--	--	--	450	--	
	4/19/2005	N	--	< 0.1 U	0.2	0.2	< 0.02 U	--	46.9	48.8	3.3	3.4	--	--	--	--	--	--	370	--	
	6/1/2005	N	--	< 0.05 U	0.12	0.17	< 0.05 U	--	27.1	39.6	2.4	3.52	--	--	--	--	--	--	420	--	
	6/21/2005	N	--	< 0.05 U	0.18	0.24	< 0.05 U	--	56	54.6	5.44	8.26	--	--	--	--	--	--	490	--	
	7/21/2005	N	--	< 0.05 U	0.21	0.21	< 0.05 U	--	55.6	55	3.66	3.62	--	--	--	--	--	--	810	--	
	2/9/2006	N	--	0.0806	--	0.301	--	< 2 U	--	53.1	4.4	4.4	< 100 U	< 100 U	< 100 U	< 300 U	< 3000 U	< 8000 U	1,000	46,700	
	7/25/2006	N	--	0.216	--	0.157	--	< 2 U	--	10.4	0.786	0.786	< 10 U	< 10 U	< 10 U	< 200 U	1600	5.2	1,050	15,100	
	4/9/2007	N	--	0.485	--	0.165	--	< 2 U	--	21	0.443	0.443	< 50 U	< 50 U	< 50 U	< 3 U	20	< 2.5 U	1,060	--	
	4/3/2008	N	--	0.236	--	0.075	--	< 2 U	--	20.3	0.402	0.402	< 10 U	< 10 U	< 10 U	< 3 U	3.1	< 0.5 U	1,040	4,410	
	3/23/2009	N	--	0.107	--	0.0566	--	< 2 U	--	14.8	0.339	0.339	7.6	< 5 U	< 5 U	< 15 U	2.6	< 0.25 U	984	4,040	
	3/3/2010	N	--	< 0.50 U	--	< 0.50 U	--	< 0.01 U	--	19.4	< 0.50 U	< 0.50 U	< 1 U	< 2 U	< 1 U	< 1 U	1.27	< 0.05 U	849	2,960	
	5/11/2012	N	0.021	--	0.0202	--	--	0.107	2.19	--	0.274	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1000 J	3,280	
	5/20/2014	N	0.0237	--	0.0153	--	--	< 0.0500 U	0.617	--	0.0939	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,030	2,760	
	5/12/2015	N	0.0295	--	< 0.0100 U	--	--	< 0.0500 U	< 0.200 U	--	0.0877	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,050	3,010	
	5/17/2016	N	0.0166	--	0.00932 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	506	3,090	
	5/8/2017	N	0.0102	--	0.0119	--	< 0.01 U	--	0.196	--	0.0861	--	--	--	--	--	--	--	948	2,460	
	IW016	2/11/2004	N	--	< 0.05 U	0.12	0.13	0.096	--	< 0.1 U	1.9	< 0.05 U	0.05	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	980	2,710
		6/3/2004	N	--	< 0.01 U	0.07	0.07	< 0.1 U	--	38.5	42.4	5.2	5.69	--	--	--	--	--	--	2,300	--
7/7/2004		N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	84	81.1	5.8	5.8	--	--	--	--	--	--	2,100	--	
8/17/2004		N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	24	40	1	1.7	--	--	--	--	--	--	2,500	--	
10/10/2004		N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	212	185	4.7	4.1	--	--	--	--	--	--	1,750	--	
11/22/2004		N	--	< 0.1 U	0.2	0.2	< 0.1 U	--	214	287	11.5	14.7	--	--	--	--	--	--	143	47,400	
1/4/2005		N	--	< 0.1 U	0.1	0.1	0.005	--	211	211	7.6	7.6	--	--	--	--	--	--	630	--	
1/27/2005		N	--	< 0.1 U	< 0.1 U	0.2	< 0.1 U	--	89.5	213	3.3	12	--	--	--	--	--	--	340	--	
2/16/2005		N	--	< 0.1 U	0.1	0.2	< 0.005 U	--	152	261	5.9	10	--	--	--	--	--	--	510	--	
3/15/2005		N	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	87.4	112	1.3	3.9	--	--	--	--	--	--	320	--	
4/19/2005		N	--	< 0.1 U	0.2	0.2	< 0.02 U	--	212	200	14.5	13.7	--	--	--	--	--	--	350	--	
6/1/2005		N	--	< 0.05 U	0.08	0.14	< 0.05 U	--	106	205	5.4	14	--	--	--	--	--	--	400	--	
6/21/2005		N	--	< 0.01 U	0.07	0.07	< 0.05 U	--	92.5	75	4.44	4.22	--	--	--	--	--	--	520	--	
7/20/2005		N	--	< 0.05 U	0.09	0.09	< 0.05 U	--	100	108	4.95	5.2	--	--	--	--	--	--	450	--	
2/8/2006		N	--	0.185	--	0.138	--	< 2 U	--	270	13.1	13.1	< 100 U	< 100 U	< 100 U	< 300 U	< 600 U	< 4000 U	848	71,600	
7/25/2006		N	--	0.133	--	0.0484	--	< 2 U	--	117	13.4	13.4	< 10 U	< 10 U	< 10 U	< 30 U	2600	4.4	987	18,100	
3/28/2007		N	--	0.06	--	0.0293	--	< 1 U	--	13.4	1.42	1.42	< 100 U	< 100 U	< 100 U	< 3 U	19	< 5 U	846	--	
4/2/2008		N	--	0.0586	--	0.0221	--	< 2 U	--	11.5	1	1	< 5 U	< 5 U	< 5 U	< 15 U	3.5	< 0.250 U	769	4,150	
3/24/2009		N	--	0.0537	--	0.0202	--	< 2 U	--	14.4	0.978	0.978	< 5 U	< 5 U	< 5 U	< 15 U	4.5	< 0.25 U	677	3,240	
3/3/2010		N	--	< 0.50 U	--	< 0.50 U	--	< 0.01 U	--	19.1	0.99	0.99	< 1 U	< 2 U	< 1 U	< 1 U	1.1	< 0.05 U	486	2,980	
5/9/2012		N	0.0817	--	< 0.0100 U	--	--	0.0642	0.791												

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
IW019	4/6/2007	N	--	< 0.02 U	--	1.24	--	1.1	--	< 0.2 U	0.0268	0.0268	< 1 U	< 1 U	< 1 U	< 3 U	0.74	< 0.05 U	1,620	--
	4/8/2008	N	--	< 0.02 U	--	1.51	--	1.4	--	< 0.2 U	0.0283	0.0283	< 1 U	< 1 U	< 1 U	< 3 U	0.47	< 0.05 U	1,680	4,470
	3/25/2009	N	--	< 0.02 U	--	1.57	--	1.4	--	< 0.2 U	0.0297	0.0297	< 1 U	< 1 U	< 1 U	< 3 U	0.61	< 0.05 U	1,730	4,680
	3/25/2010	N	--	< 0.05 U	--	0.328	--	0.425	--	0.065	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.724	< 0.074 U	803	2,390
	5/11/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	69.0 J	684
	5/10/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0196 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	386	1,390
	5/20/2014	N	< 0.0200 U	--	0.00194 J	--	--	< 0.0100 U	< 0.200 U	--	0.0419	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	484	1,580
	5/8/2015	N	0.0112 J	--	0.00352 J	--	--	< 0.0100 U	< 0.200 U	--	0.0441	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	361	1,660
	5/19/2016	N	0.0319	--	1.38	--	1.27	--	--	--	--	--	< 0.408 U	< 1 U	< 0.657 U	< 0.642 U	< 0.986 U	< 0.986 U	1,220	3,960
	5/5/2017	N	0.00833 J	--	0.563 J	--	0.87	--	< 0.02 U	--	0.0328 J	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	1,070	2,540
9/26/2017	N	0.00947	--	0.743	--	0.693	--	0.157 J	--	0.24	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	1,000	4,380	
4/4/2018	Reg	--	0.00908	--	0.66	--	0.616	< 0.100 U	--	--	0.381	< 2 U	< 2 U	< 2 U	< 2 U	< 1.50 U	< 1.50 U	1,070	3,190	
9/11/2018	Reg	0.0101	--	0.757	--	0.687	--	--	< 0.100 U	0.0349	--	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.50 U	1,060	3,270	
IW020	2/7/2006	N	--	< 0.02 U	--	0.777	--	0.76	--	< 0.2 U	0.017	0.017	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	999	2,990
	7/24/2006	N	--	< 0.02 U	--	0.898	--	0.8	--	< 0.2 U	0.0077	0.0077	< 1 U	< 1 U	< 1 U	< 3 U	0.31	< 0.05 U	521	2,660
	4/10/2007	N	--	< 0.02 U	--	1.51	--	1.5	--	3.23	0.124	0.124	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1200	--
	4/8/2008	N	--	< 0.02 U	--	1.79	--	1.7	--	< 0.2 U	0.0295	0.0295	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	1180	4,170
	3/25/2009	N	--	< 0.02 U	--	2	--	1.9	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	1350	4,980
	3/5/2010	N	--	< 0.05 U	--	< 0.05 U	--	1.29	--	1.29	0.083	0.083	< 1 U	< 1 U	< 1 U	< 1 U	0.116	< 0.05 U	1000	2,260
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	98.8 J	783
5/10/2013	N	< 0.0200 U	--	0.111	--	--	0.0931	< 0.200 U	--	0.0407	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	408	2,000	
IW021	2/7/2006	N	--	< 0.02 U	--	0.701	--	0.68	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	692	2,530
	7/24/2006	N	--	< 0.02 U	--	0.93	--	0.81	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	673	2,660
	4/5/2007	N	--	< 0.02 U	--	1.14	--	1.2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	753	--
	4/8/2008	N	--	< 0.02 U	--	1.73	--	1.6	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	859	3,370
	3/25/2009	N	--	< 0.02 U	--	1.74	--	1.6	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	1000	3,880
	3/5/2010	N	--	< 0.05 U	--	1.34	--	1.35	--	0.171	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.1	< 0.05 U	817	3,730
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	206 J	1,210
	5/13/2013	N	0.0120 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	266	1,550
	5/21/2014	N	< 0.0200 U	--	0.00181 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	545	2,270
	5/8/2015	N	0.0113 J	--	0.00705 J	--	--	0.00660 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	499	2,290
5/19/2016	N	0.0323	--	0.76	--	0.716	--	--	--	--	--	--	--	--	--	--	--	886	3,670	
5/5/2017	N	0.00845	--	0.706	--	0.766	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	855	3,740	
IW022	2/7/2006	N	--	< 0.02 U	--	0.526	--	0.5	--	0.298	0.0103	0.0103	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	624	2,240
	7/25/2006	N	--	< 0.02 U	--	0.489	--	0.46	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	662	2,080
	4/10/2007	N	--	< 0.02 U	--	0.505	--	0.52	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	713	--
	4/7/2008	N	--	< 0.02 U	--	0.785	--	0.82 *	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	781	2,700
	3/25/2009	N	--	< 0.02 U	--	0.525	--	0.53	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	670	2,750
	3/5/2010	N	--	< 0.05 U	--	0.477	--	0.445	--	0.135	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.085	< 0.05 U	460	2,460
	5/17/2012	N	< 0.0100 UJ	--	0.0533	--	--	0.0499	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	216 J	1,170
	5/13/2013	N	< 0.0200 U	--	0.139	--	--	0.133	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	375	1,500
	5/21/2014	N	< 0.0200 U	--	0.0384	--	--	0.035	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	454	2,220
	5/8/2015	N	0.00997 J	--	0.0167	--	--	0.0145	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U</						

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
IW024	8/11/2009	N	--	< 0.02 U	--	1.47	--	1.2	--	< 0.2 U	0.398	0.398	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	1020	4,840
	3/2/2010	N	--	< 0.05 U	--	1.35	--	1.44	--	0.132	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.053 U	< 0.05 U	910	4,360
	5/24/2012	N	< 0.0100 U	--	0.106	--	--	0.107	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	608	3,050
	5/14/2013	N	< 0.0200 U	--	0.0723	--	--	0.0651	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	443	2,230
	5/22/2014	N	< 0.0200 U	--	0.321	--	--	0.306	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	724	3,190
	5/29/2015	N	0.0135 J	--	0.0711	--	--	0.064	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	438	2,330
	5/19/2016	N	0.0312	--	1.22	--	1.12	--	--	--	--	--	--	--	--	--	--	--	846	3,970
	5/4/2017	N	0.00877	--	1.13	--	1.26	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	871	3,960
4/4/2018	Reg	--	0.00924	--	0.99	--	1.04	< 0.100 U	--	--	0.000827 J	--	--	--	--	--	--	920	3,450	
IW025	2/8/2006	N	--	< 0.02 U	--	0.377	--	0.39	--	0.4	0.0077	0.0077	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	584	2,380
	7/21/2006	N	--	< 0.02 U	--	0.645	--	0.63	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	632	2,670
	4/3/2007	N	--	< 0.02 U	--	--	--	--	--	0.978	0.0146	0.0146	--	--	--	--	--	--	--	--
	4/14/2008	N	--	< 0.02 U	--	1.19	--	1.2	--	0.451	0.0066	0.0066	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	801	3,220
	3/16/2009	N	--	< 0.02 U	--	0.0479	--	< 0.020 U	--	< 0.2 U	0.157	0.157	< 1 U	1.5	1	5.4	< 0.097 U	< 0.05 U	502	3,290
	8/13/2009	N	--	< 0.02 U	--	0.0387	--	< 0.020 U	--	< 0.2 U	0.263	0.263	< 1 U	< 1 U	1	5.8	0.19	< 0.05 U	582	3,220
	3/2/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.217	--	0.162	0.46	0.46	< 1 U	< 2 U	< 1 U	2.3	< 0.051 U	< 0.05 U	627	3,710
	5/24/2012	N	< 0.0100 U	--	0.0777	--	--	0.0312	1.2	--	0.223	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	501	2,930
	5/14/2013	N	< 0.0200 U	--	0.0269	--	--	< 0.0100 U	0.993	--	0.12	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	531	2,490
	5/22/2014	N	< 0.0200 U	--	0.0595	--	--	< 0.0100 U	< 0.200 U	--	0.345	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	680	2,730
	5/29/2015	N	0.00840 J	--	0.0676	--	--	< 0.0100 U	1.99	--	0.174	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	513	2,970
	5/19/2016	N	0.0255	--	0.0552	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	755	4,430
	5/4/2017	N	< 0.002 U	--	0.0255	--	< 0.01 U	--	0.063	--	0.822	--	--	--	--	--	--	--	832	3,750
	IW026	2/8/2006	N	--	< 0.02 U	--	0.499	--	0.47	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	612
7/21/2006		N	--	< 0.02 U	--	0.618	--	0.6	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	583	2,990
4/3/2007		N	--	< 0.02 U	--	0.0403	--	0.035	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	467	--
4/14/2008		N	--	< 0.02 U	--	--	--	--	--	0.648	0.0178	0.0178	--	--	--	--	--	--	--	1,630
3/16/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.020 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	518	1,790
8/13/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.020 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	460	1,640
3/2/2010		N	--	< 0.05 U	--	< 0.050 U	--	--	--	0.135	< 0.05 U	< 0.05 U	< 1 U	< 2 U	< 1 U	< 1 U	0.075	< 0.05 U	--	--
3/17/2010		N	--	--	--	--	--	< 0.010 U	--	--	--	--	--	--	--	--	--	--	205	760
5/23/2012		N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	513	1,650
5/14/2013		N	< 0.0200 U	--	0.00527 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	484	1,730
5/22/2014		N	0.00624 J	--	0.114	--	--	0.117	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	593	2,750
5/29/2015		N	0.0171 J	--	0.00539 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	277	1,400
5/19/2016		N	0.0283	--	0.752	--	0.662	--	--	--	--	--	--	--	--	--	--	--	614	3,220
5/4/2017		N	0.0085	--	0.69	--	0.737	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	698	3,140
IW027	2/8/2006	N	--	< 0.02 U	--	0.591	--	0.57	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	789	3,430
	7/21/2006	N	--	< 0.02 U	--	0.699	--	0.69	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	732	3,570
	4/4/2007	N	--	< 0.02 U	--	0.0352	--	0.023	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	197	--
	4/14/2008	N	--	< 0.02 U	--	0.41	--	0.42	--	0.254	0.008	0.008	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	575	3,090
	3/25/2009	N	--	< 0.02 U	--	0.383	--	0.38	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	2880	2,880
	3/8/2010	N	--	0.3	--	0.347	--	0.383	--	< 0.03 U	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.052 U	< 0.05 U	497	2,760
	5/23/2012	N	< 0.0100 UJ	--	0.0157	--	--	0.0105	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	344	2,280
	5/14/2013	N	< 0.0200 U	--	0.0123	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	98.3	1,030
	5/22/2014	N	0.00784 J	--	0.0139	--	--	0.0103	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2						

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
IW029P	9/6/2012	N	--	--	--	0.184	--	0.126	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--
	11/19/2012	N	--	--	--	< 0.0500 U	--	< 0.0100 U	119	58.1	--	--	--	--	--	--	--	--	--	--
	5/7/2014	N	0.00591 J	--	< 0.0100 U	--	--	< 0.0500 U	32.2	--	1.91	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	922	6,860
	6/2/2015	N	< 0.0200 U	--	0.00350 J	--	--	< 0.0100 U	0.139 J	--	2.15	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	921	5,870
	5/11/2017	N	0.106	--	0.00148 J	--	< 0.01 U	--	81.4	--	4.41	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	1,100	5,550
	5/11/2017	FD	0.107	--	0.00185 J	--	0.00310 J	--	80.7	--	4.18	--	< 2 U	< 2 U	< 2 U	8.66	< 1.5 U	< 1.5 U	1,080	5,440
IW030	6/21/2012	N	--	< 0.00400 U	--	0.0513	--	--	--	--	--	--	< 1.00 U	< 1.00 U	< 1.00 U	3.75	--	--	--	--
	7/11/2012	N	--	--	--	0.907	--	0.839	--	--	--	--	--	--	--	--	--	--	--	--
	9/6/2012	N	--	--	--	0.429	--	0.356	< 0.200 U	0.227	--	--	--	--	--	--	--	--	--	--
	10/24/2013	N	--	--	--	0.0168 J	--	< 0.200 R	38.3 J	118 J	--	--	--	--	--	--	--	--	--	--
	10/24/2013	FD	--	--	--	0.537 J	--	0.549 J	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--
LordWW	9/29/1997	N	< 0.10 U	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	480	2,200
	1/19/1999	N	< 0.10 U	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--	800	3,100
	1/23/2006	N	--	< 0.02 U	--	0.0677	--	< 0.02 U	--	9.2	0.0466	0.0466	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,260	3,690
	6/27/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	71.3	422
	6/27/2006	FD	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	62.6	430
	4/5/2007	N	--	< 0.02 U	--	0.148	--	< 0.02 U	--	31.3	0.34	0.34	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	1,540	--
	9/18/2007	N	--	7.32	--	< 0.015 U	--	< 0.02 U	--	7.32	0.192	0.192	< 1 U	< 1 U	< 1 U	< 3 U	0.93	< 0.5 U	1,320	--
	3/26/2008	N	--	< 0.02 U	--	0.0664	--	< 0.02 U	--	28.1	0.272	0.272	< 1 U	< 1 U	< 1 U	< 3 U	0.28	< 0.05 U	1,470	3,600
	8/13/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	4.17	0.144	0.144	8.3	9.4	19	3.9	< 0.1 U	0.092	1,380	3,400
	3/19/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	4.2	0.138	0.138	18	4.5	1.4	< 3 U	< 0.3 U	0.08	1,610	4,270
	8/21/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	1.34	0.139	0.139	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	2,040	--
	3/12/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.016	--	0.23	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	583	4,060
	8/18/2010	N	--	0.014	--	< 0.050 U	--	< 0.01 U	--	0.591	0.11	0.11	< 1 U	< 2 U	< 1 U	< 1 U	0.055	< 0.05 U	1,220	4,110
	5/18/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.115	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	1,670	4,670
	10/26/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	9.71	0.208	0.208	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,540	3,270
	5/23/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	0.0174	< 0.200 U	--	0.0539	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1430 E	3,330
	11/5/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	0.507	--	0.261	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,320	2,600
	5/9/2014	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0500 U	< 0.200 U	--	0.0822	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,640	2,400
	11/10/2014	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.147	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,870	2,780
	5/27/2015	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0743	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,500	3,140
	11/9/2015	N	< 0.0200 U	--	0.00275 J	--	--	< 0.0100 U	< 0.200 U	--	0.0666	--	--	--	--	--	--	--	1,450	2,540
	5/16/2016	N	< 0.00336 U	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	1,830	2,360
	9/20/2016	N	0.0178	--	0.00295 J	--	< 0.01 U	--	0.447	--	0.086	--	--	--	--	--	--	--	1,370	2,440
	5/11/2017	N	0.000551 J	--	0.00161 J	--	< 0.01 U	--	0.18	--	0.0971	--	--	--	--	--	--	--	1,490	2,730
	MW001	8/1/1996	N	--	--	--	--	--	--	--	--	--	--	9	69	82	169	--	--	--
4/23/1997		N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	384 11	33	75	49	--	--	200	2,000
1/20/1999		N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	6	19	29	29	--	--	370	2,400
1/20/1999		FD	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	6	17	28	24	--	--	350	2,200
11/17/1999		N	--	--	< 0.05 U	--	--	--	--	--	--	--	8	18	14	42	--	--	250	2,200
11/17/1999		FD	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	350	1,270
5/31/2001		N	--	< 0.05 U	--	< 0.05 U < 0.05 U	--	0.03 < 0.005 U	--	--	--	--	60	20	540	90	--	--	260	2,180
5/31/2001		FD	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	70	< 20 U	580	100	--	--	250	2,120
2/7/2002		N	--	--	< 0.05 U	--	0.025	--	< 0.1 U	0.9	1.08	0.99	2	9	59	84	< 0.26 U	0.489	540	2,620
9/23/2002		N	--	--	< 0.05 U	--	0.019	--	--	--	--	--	< 2 U	4	80	170	0.28	0.93	400	--
9/23/2002		FD	--	--	< 0.05 U	--	0.017	--	--	--	--	--	2	6	85	180	0.3	1	350	--
1/8/2003		N	--	--	--	--	0.036	--	--	--	--	--	< 2 U	3	18	26	< 0.25 U	0.22	500	--
1/8/2003		FD	--	--	--	--	0.053	--	--	--	--	--	< 2 U	2	17	24	< 0.25 U	0.28	510	--
3/27/2003		N	--	--	--	--	0.008	--	--	--	--	--	< 2 U	< 2 U	16	23	< 0.25 U	0.15	380	--
3/27/2003		FD	--	--	--	--	0.025	--	--	--										

North Eunice Historical Data 20190117.xlsx

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW003	1/6/2005	N	--	--	0.3	--	0.02	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	570	--	
	6/3/2005	N	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	480	--	
	1/25/2006	N	--	< 0.02 U	--	0.194	--	0.2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	514	2,420	
	7/7/2006	N	--	< 0.02 U	--	0.187	--	0.17	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	530	2,400	
	4/16/2007	N	--	< 0.02 U	--	0.116	--	0.1	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	372	--	
	4/3/2008	N	--	< 0.02 U	--	0.085	--	0.052	--	< 0.2 U	< 0.005 U	< 0.005 U	3.7	1.2	< 1 U	< 3 U	< 0.096 U	< 0.05 U	317	2,180	
	5/22/2012	N	< 0.0100 U	--	0.0319	--	--	0.0295	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	20.9	1,210	
	5/16/2013	N	0.0213	--	0.0174	--	--	0.016	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	45.7	1,040	
	5/7/2014	N	0.0109 J	--	0.0181	--	--	0.0153	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	383	2,000	
	6/2/2015	N	0.0116 J	--	0.0307	--	--	0.028	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	191	1,390	
	5/19/2016	N	0.00846 J	--	0.065	--	0.0833	--	--	--	--	--	--	--	--	--	--	--	664	3,030	
	5/19/2016	FD	0.00739 J	--	0.136	--	0.167	--	--	--	--	--	--	--	--	--	--	--	637	2,710	
	5/4/2017	N	0.0135	--	0.0481	--	< 0.01 U	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	64.1	784	
MW004	4/23/1997	N	< 0.10 U	--	0.08	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 0.001 U	< 0.001 U	290	1,600	
	6/11/1997	N	< 0.10 U	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/21/1999	N	< 0.10 U	--	0.09	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 0.001 U	< 0.001 U	310	1,600	
	1/21/1999	FD	< 0.10 U	--	0.09	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	320	1,600	
	11/18/1999	N	--	--	0.42	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 0.001 U	< 0.001 U	620	2,600	
	5/24/2001	N	--	< 0.05 U	--	0.67 < 0.05 U	--	0.61 < 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	800	3,360	
	1/28/2002	N	--	--	1.3	--	0.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 2 U	< 0.27 U	< 0.05 U	1,030	3,990	
	9/18/2002	N	--	--	0.39	--	0.29	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	610	--	
	12/30/2002	N	--	--	--	--	0.26	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	700	--	
	3/18/2003	N	--	--	--	--	0.39	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	730	--	
	6/4/2003	N	--	--	--	--	0.334	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.24 U	< 0.05 U	680	--	
	1/19/2004	N	--	--	0.1	--	0.053	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	650	--	
	6/24/2004	N	--	--	0.12	--	0.063	--	--	--	--	--	--	--	--	--	--	--	370	--	
	1/4/2005	N	--	--	0.6	--	0.55	--	--	--	--	--	--	--	--	--	--	--	560	--	
	6/6/2005	N	--	--	0.93	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	760	--	
	1/25/2006	N	--	< 0.02 U	--	1.5	--	0.14	--	< 0.2 U	0.0209	0.0209	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	904	3,320	
	7/7/2006	N	--	< 0.02 U	--	1.79	--	1.8	--	< 0.2 U	0.0184	0.0184	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	776	3,320	
	4/17/2007	N	--	< 0.02 U	--	1.92	--	0.51	--	< 0.2 U	0.0163	0.0163	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1,130	--	
	4/15/2008	N	--	< 0.02 U	--	2.28	--	1.9	--	< 0.2 U	0.0055	0.0055	2.8	< 1 U	< 1 U	< 3 U	0.14	< 0.05 U	1,030	3,360	
	3/30/2009	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	0.0192	0.0192	--	--	--	--	--	--	--	3,940	
	3/31/2009	N	--	--	--	--	1.46	--	1.5	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	0.23	< 0.05 U	852	--	
	3/8/2010	N	--	< 0.05 U	--	1.18	--	1.17	--	< 0.03 U	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	0.196	< 0.05 U	781	3,520	
	5/22/2012	N	< 0.0100 U	--	0.277	--	--	0.286	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	640	3,190	
	5/22/2012	FD	< 0.0100 U	--	0.274	--	--	0.285	< 0.200 U	--	0.028	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	658	3,700	
	5/15/2013	N	< 0.0200 U	--	0.123	--	--	0.0998	< 0.200 U	--	0.0134 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	298	1,810	
	5/21/2014	N	< 0.0200 U	--	0.277	--	--	0.277	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	571	2,800	
	5/28/2015	N	0.00762 J	--	0.00503 J	--	--	< 0.0100 U	< 0.200 U	--	0.0463	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	212	1,440	
	5/19/2016	N	0.0303	--	0.327	--	0.334	--	--	--	--	--	< 0.408 U	< 1 U	< 0.657 U	< 0.642 U	< 0.987 U	< 0.987 U	576	3,120	
	5/5/2017	N	0.00984	--	0.339 J	--	0.257 J	--	0.0228	--	< 0.002 UJ	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	672 J	2,880	
	5/5/2017	FD	0.00898	--	0.672 J	--	0.796	--	< 0.02 U	--	0.0428 J	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	1120 J	3,550	
MW004A	4/23/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	170	790	
	10/23/1997	N	< 0.10 U	--	0.05	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	
	1/21/1999	N	< 0.10 U	--	0.05	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	240	830	
	5/23/2001	N	--	< 0.05 U	--	0.13	--	0.14	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	470	1,320	
	1/28/2002	N	--	--	0.15	--	0.086	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 2 U	< 0.27 U	< 0.05 U	490	1,540	
	9/17/2002	N	--	--	0.17	--	0.12	--	--	--	--	--	--	--	--	--	--	--	440		

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/19/2016	N	0.022	--	0.455	--	0.447	--	--	--	--	--	--	--	--	--	--	--	559	2,070
	5/5/2017	N	0.0154 J	--	0.489 J	--	0.494	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	643	2,420
	9/22/2017	N	0.0154	--	0.463	--	0.448	--	< 0.1 U	--	0.000947 J	--	--	--	--	--	--	--	579	2,640
	4/4/2018	Reg	--	0.0145	--	0.498	--	0.438	< 0.100 U	--	--	0.000681 J	< 2 U	< 2 U	< 2 U	< 2 U	< 1.50 U	< 1.50 U	628	2,110
	9/14/2018	Reg	0.0158	--	0.515	--	0.497	--	--	< 0.100 U	0.000320 J	--	--	--	--	--	--	--	632	2,230
MW005	4/22/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	540	310	93	245	--	--	800	2,800
	2/11/2002	N	--	--	< 0.05 U	--	0.14	--	4.3	6.4	0.44	0.4	620	< 40 U	90	140	15	1.79	460	2,390
	2/11/2002	FD	--	--	< 0.05 U	--	< 0.005 U	--	3.8	6.9	0.44	0.37	600	< 20 U	80	130	27	1.83	460	2,270
	6/30/2005	N	--	--	0.03	--	--	--	--	--	--	--	810	< 10 U	70	< 30 U	3.9	2.6	910	--
	1/27/2006	N	--	< 0.02 U	--	0.0202	--	< 0.02 U	--	5.8	0.916	0.916	520	< 5 U	64	< 5 U	2.5	< 0.6 U	1,010	2,830
	7/13/2006	N	--	< 0.02 U	--	0.0344	--	< 0.02 U	--	5.32	0.807	0.807	440	< 1 U	72	7.8	2.3	1.5	894	2,900
	4/19/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	9.94	0.837	0.837	810	1.3	64	12	3.2	2.4	1,080	--
	4/17/2008	N	--	< 0.02 U	--	0.0151	--	< 0.2 U	--	10.1	1.88	1.88	4	< 1 U	1.2	< 3 U	2.8	0.23	1,500	4,010
	4/7/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	8.04	0.807	0.807	95	< 1 U	11	< 3 U	3.2	0.29	1,160	2,680
	3/16/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.21	--	2.22	1.11	1.11	12.5	< 1 U	6.3	< 1 U	1.68	< 0.05 U	823	3,430
	5/24/2012	N	0.0229	--	< 0.0100 U	--	0.0118	< 0.200 U	--	--	0.0444	--	188	< 2.00 U	142	2.88	--	--	311	1,510
	5/22/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.100 U	0.692	--	0.0547	--	396	< 2.00 U	222	3.13	--	--	210	1,300
MW006	4/22/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	340	280	110	330	--	--	1,500	3,200
	2/11/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	0.2	2.4	0.52	0.53	680	670	110	260	71	3.58	1,400	3,760
	4/23/2007	N	--	0.0264	--	< 0.015 U	--	< 0.02 U	--	29	3.24	3.24	1500	360	100	840	6.3	4.2	2,970	--
	4/17/2008	N	--	0.0254	--	< 0.015 U	--	< 0.20 U	--	12.9	3.84	3.84	36	< 1 U	3.9	3.6	3.1	0.4	2,780	5,660
	4/7/2009	N	--	0.0255	--	< 0.015 U	--	< 0.02 U	--	16.1	2.13	2.13	510	< 5 U	42	150	3.4	1.6	2,310	4,340
MW007	3/16/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.012	--	0.313	1.91	1.91	878	< 1 U	13.2	< 1 U	1.88	0.742	1,250	4,270
	4/22/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	550	2,600
	8/19/1997	N	< 0.10 U	--	0.35	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--
	8/25/1997	N	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/21/1999	N	< 0.10 U	--	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	550	2,500
	11/18/1999	N	--	--	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	520	2,700
	5/24/2001	N	--	< 0.05 U	--	0.45 < 0.05 U	--	0.4 0.02	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	600	2,980
	1/30/2002	N	--	--	0.11	--	0.086	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	390	2,370
	9/12/2002	N	--	--	0.3	--	0.21	--	--	--	--	--	--	--	--	--	--	--	710	--
	12/19/2002	N	--	--	--	--	0.053	--	--	--	--	--	--	--	--	--	--	--	450	--
	3/13/2003	N	--	--	--	--	0.059	--	--	--	--	--	--	--	--	--	--	--	410	--
	6/3/2003	N	--	--	--	--	0.005	--	--	--	--	--	--	--	--	--	--	--	390	--
	1/21/2004	N	--	--	0.03	--	0.013	--	--	--	--	--	--	--	--	--	--	--	410	--
	6/23/2004	N	--	--	0.02	--	0.018	--	--	--	--	--	--	--	--	--	--	--	370	--
	1/4/2005	N	--	--	0.03	--	0.021	--	--	--	--	--	--	--	--	--	--	--	290	--
	6/3/2005	N	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	310	--
	1/24/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.287	0.0054	0.0054	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	274	2,450
	7/7/2006	N	--	< 0.02 U	--	0.0232	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	206	1,890
	4/16/2007	N	--	< 0.02 U	--	0.0152	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	193	--
	4/3/2008	N	--	< 0.02 U	--	0.036	--	0.034	--	< 0.2 U	< 0.005 U	< 0.005 U	2.7	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	185	1,390
	5/22/2012	N	< 0.0100 U	--	0.032	--	0.0334	< 0.200 U	--	< 0.0200 U	--	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	472	2,190
	5/16/2013	N	0.0255	--	0.021	--	0.0187	< 0.200 U	--	< 0.0200 U	--	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	173	1,220
	5/9/2014	N	0.0122 J	--	0.0202	--	0.0205	< 0.200 U	--	< 0.0200 U	--	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	366	1,780
	6/2/2015	N	0.0124 J	--	0.0145	--	0.0105	< 0.200 U	--	< 0.0200 U	--	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	81.6	1,070
	5/19/2016	N	0.00952 J	--	0.0115	--	0.025	--	--	--	--	--	--	--	--	--	--	--	342	2,020
	5/4/2017	N	0.0119	--	0.0105	--	< 0.01 U	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	43.2	1,040
MW007A	4/22/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	260	1,200
	10/22/1997	N	< 0.10 U	--	0.06	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--
	1/21/1999	N	< 0.10 U	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	190	920
	5/23/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.103	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	260	1,020
	5/23/2001	FD	--	< 0.05 U	--	0.09	--	0.098	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	270	1,050
	1/29/2002	N	--	--	0.19	--	0.09	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	350	1,640
	9/17/2002	N	--	--	0.27	--	0.2	--	--	--	--	--	--	--	--	--	--	--	380	--
	12/30/2002	N	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	440	--
	3/17/2003	N	--	--	--	--	0.19	--	--	--	--	--	--	--	--	--	--	--	340	--
	6/3/2003	N	--	--	--	--	0.283	--	--	--	--	--	--	--	--	--	--	--	490	--
	1/21/2004	N	--	--	0.24	--	0.14	--	--	--	--	--	--	--	--	--	--	--	340	--
	6/29/2004	N	--	--	0.16	--	0.15	--	--	--	--	--	--	--	--	--	--	--	230	--
	1/10/2005	N	--	--	0.33	--	0.55	--	--	--	--	--	--	--	--	--	--	--	430	--
	6/3/2005	N	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	310	--
	1/26/2006	N	--	< 0.02 U	--	0.53	--	0.52	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	585	2,410
	7/7/2006	N	--	< 0.02 U	--	0.367	--	0.38	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	409	1,770
	4/16/2007	N	--	< 0.02 U	--	0.641	--	0.69	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	710	--
	4/3/2008	N	--	< 0.02 U	--	0.732	--	0.68	--	< 0.2 U	0.0112	0.0112	9.9	2.1	< 1 U	< 3 U	< 0.096 U	< 0.05 U	689	2,840
	5/22/2012	N	< 0.0100 U	--	0.288	--	--	0.29	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	357 J	1,870

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	9/6/2012	N	--	--	--	0.296	--	0.308	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--
	11/19/2012	N	--	--	--	0.305 0.327	--	0.319	< 0.200 U	< 0.200 U < 0.200 U	--	--	--	--	--	--	--	--	--	--
	5/16/2013	N	0.0231	--	0.275	--	--	0.265	< 0.200 U	--	0.00660 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	344	1,600
	5/7/2014	N	0.0113 J	--	0.279	--	--	0.261	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	374	1,580
	6/2/2015	N	0.0118 J	--	0.269	--	--	0.261	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	379	1,830
	5/19/2016	N	0.0144	--	0.796	--	0.678	--	--	--	--	--	--	--	--	--	--	--	567	3,120
	9/21/2016	N	< 0.00336 U	--	0.733	--	0.822	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	688	3,090
	5/4/2017	N	0.0102	--	0.661	--	0.769	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	764	2,950
	9/22/2017	N	0.0116	--	0.729	--	0.65	--	< 0.1 U	--	0.00327	--	--	--	--	--	--	--	662	3,290
	4/4/2018	Reg	--	0.0102	--	0.705	--	0.129	< 0.100 U	--	--	0.000979 J	--	--	--	--	--	--	815	3,060
MW008	9/14/2018	Reg	0.0115	--	0.763	--	0.67	--	< 0.100 U	0.000655 J	--	--	--	--	--	--	--	--	801	3,040
	8/20/1997	N	< 0.10 U	--	5.2	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--
	9/16/1997	N	--	--	5.4	--	6.46	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/1997	N	--	--	4.6	--	3.31	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/1999	N	< 0.10 U	--	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--	960	3,800
	11/18/1999	N	--	--	6.1	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	4,500
	5/31/2001	N	--	< 0.05 U	--	5.66	--	9	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,400	5,090
	8/29/2001	N	--	--	0.52 0.44	0.68 0.79	< 0.5 U < 0.5 U	0.8 0.6	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	--	--
	9/27/2001	N	--	--	1.75	--	1.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/2002	N	--	--	3.54	--	2.8	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	970	3,780
	9/18/2002	N	--	--	4.99	--	3.1	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,250	--
	1/6/2003	N	--	--	--	--	2.3	--	--	--	--	--	--	--	--	--	--	--	970	--
	3/26/2003	N	--	--	--	--	2.8	--	--	--	--	--	--	--	--	--	--	--	1,400	--
	6/5/2003	N	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	6/9/2003	N	--	< 0.05 U	5.16	5.22	7.07	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	6/9/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,340	--
	6/30/2003	N	--	< 0.05 U	3.24	3.37	2.71	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,020	--
	7/9/2003	N	--	< 0.05 U	4.13	4.02	3.6	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	7/15/2003	N	--	< 0.05 U	4.14	3.85	< 5 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,110	--
	7/28/2003	N	--	< 0.02 U	2.13	2.1	3.1	--	< 0.05 U	< 0.1 U	< 0.02 U	< 0.05 U	--	--	--	--	--	--	1,100	--
	8/21/2003	N	--	< 0.05 U	4.52	4.67	4.1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	9/29/2003	N	--	< 0.05 U	4.66	4.9	2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	10/27/2003	N	--	< 0.05 U	5.21	5.55	2.8	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	12/4/2003	N	--	< 0.05 U	4.7	4.79	2.7	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,090	--
	1/5/2004	N	--	< 0.05 U	3.55	3.34	1	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	950	--
	3/1/2004	N	--	< 0.05 U	3.16	3.81	2.3	--	< 0.1 U	0.8	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,020	--
	3/31/2004	N	--	< 0.01 U	3.11	3.31	2.6	--	< 0.1 U	0.6	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,070	3,960
	5/4/2004	N	--	< 0.01 U	3.9	3.67	1.1	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	6/7/2004	N	--	< 0.01 U	4.13	4.35	4	--	0.2	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,220	--
	7/7/2004	N	--	< 0.01 U	4.17	3.33	2.2	--	< 0.25 U	0.94	< 0.01 U	0.02	--	--	--	--	--	--	1,200	--
	8/10/2004	N	--	< 0.01 U	2.28	2.42	1.6	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,050	--
	9/16/2004	N	--	< 0.01 U	4.44	3.92	1.3	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,290	--
	10/4/2004	N	--	< 0.01 U	2.78	3.08	0.49	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	920	--
	11/8/2004	N	--	< 0.01 U	3.43	3.04	1.4	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,050	4,230
	12/16/2004	N	--	< 0.01 U	2.56	4.27	1.8	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,050	4,210
	1/13/2005	N	--	< 0.01 U	2.19	2.13	1.9	--	< 0.4 U	< 0.4 U	0.02	0.02	--	--	--	--	--	--	890	3,610
	2/8/2005	N	--	< 0.01 U	2.56	2.32	2	--	< 0.4 U	< 0.4 U	0.05	0.06	--	--	--	--	--	--	1,070	4,370
	3/8/2005	N	--	< 0.01 U	0.28	0.57	< 0.005 U	--	1.98	3.84	0.31	0.33	--	--	--	--	--	--	600	3,200
	4/6/2005	N	--	< 0.01 U	0.12	0.42	< 0.005 U	--	13.4	13.4	0.85	0.94	--	--	--	--	--	--	500	3,180
	5/11/2005	N	--	< 0.01 U	0.12	0.13	< 0.005 U	--	20.1	23.9	1.96	1.73	--	--	--	--	--	--	610	3,620
	6/7/2005	N	--	< 0.01 U	0.04	0.09	< 0.005 U	--	25.8	20.4	5.31	4.02	--	--	--	--	--	--	820	4,140
	7/6/2005	N	--	< 0.01 U	0.04	0.05	< 0.01 U	--	25.9	16	3.67	4.18	--	--	--	--	--	--	920	4,040
	8/2/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/9/2006	N	--	< 0.02 U	--	0.0515	--	< 0.08 U	--	69	4.12	4.12	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 1.2 U	702	3,740
	7/18/2006	N	--	0.0202	--	0.0221	--	< 0.02 U	--	60.1	3.79	3.79	< 1 U	< 1 U	< 1 U	< 3 U	0.33	< 0.05 U	802	3,610
	4/3/2007	N	--	0.0263	--	0.0391	--	< 0.02 U	--	59.7	1.26	1.26	< 1 U	< 1 U	< 1 U	< 3 U	0.48	0.12	701	--
	4/15/2008	N	--	< 0.02 U	--	0.0162	--	< 0.50 U	--	36.3	0.508	0.508	< 5 U	< 5 U	< 5 U	< 15 U	0.41	< 0.25 U	844	3,140
	3/30/2009	N	--	0.0363	--	< 0.015 U	--	< 0.02 U	--	52.9	1.36	1.36	< 1 U	< 1 U	< 1 U	< 3 U	0.18	< 0.05 U	799	3,730
	3/10/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.10 U	--	4.56	1.51	1.51	< 1 U	< 1 U	< 1 U	< 1 U	0.18	< 0.05 U	824	4,030
	5/25/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	0.263	--	1.22	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	983	4,280
	5/16/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	0.0712 J	--	0.871	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	839	3,760
	5/7/2014	N	< 0.0200 U	--	< 0.0100 UJ	--	--	< 0.0500 U	< 0.200 U	--	2.15	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	924	4,000
	6/3/2015	N	< 0.0200 U	--	0.00323 J	--	--	< 0.0100 U	< 0.200 UJ	--	1.71	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	943	3,930
	5/20/2016	N	0.0093 J	--	< 0.00136 U	--	< 0.0548 U	--	--	--	--	--	--	--	--	--	--	--	676	3,080
	5/4/2017	N	0.0191	--	0.00575	--	< 0.01 U	--	4.61	--	0.583	--	--	--	--	--	--	--	824	3,420
	10/28/1997	N	< 0.10 U	--	2.3	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	13	3,700

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW008A	1/22/1999	N	< 0.10 U	--	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	1,000	3,200
	5/29/2001	N	--	< 0.05 U	--	5.63	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,100	4,670
	8/29/2001	N	--	--	5.23 5.32	5.01 4.89	4.6 4	4 4.2	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	--	--
	2/4/2002	N	--	--	6.57	--	4.8	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	4,870
	9/18/2002	N	--	--	6.1	--	4	--	--	--	--	--	--	--	--	--	--	--	1,200	--
	9/18/2002	FD	--	--	6.29	--	3.7	--	--	--	--	--	--	--	--	--	--	--	1,150	--
	1/6/2003	N	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	1,220	--
	1/6/2003	FD	--	--	--	--	3.7	--	--	--	--	--	--	--	--	--	--	--	1,210	--
	3/26/2003	N	--	--	--	--	3.7	--	--	--	--	--	--	--	--	--	--	--	1,230	--
	3/26/2003	FD	--	--	--	--	3.2	--	--	--	--	--	--	--	--	--	--	--	1,230	--
	6/5/2003	N	--	--	--	--	4.23	--	--	--	--	--	--	--	--	--	--	--	1,200	--
	6/5/2003	FD	--	--	--	--	4.63	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	6/9/2003	N	--	< 0.05 U	5.6	5.47	7.8	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	6/9/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,240	--
	6/30/2003	N	--	< 0.05 U	5.17	5.21	3.6	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	7/9/2003	N	--	< 0.05 U	5.22	2.01	3.88	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,100	--
	7/15/2003	N	--	< 0.05 U	5.28	4.95	< 5 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,220	--
	7/29/2003	N	--	< 0.05 U	4.38	4.52	3.1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,240	--
	8/21/2003	N	--	< 0.05 U	3.24	3.86	0.027	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,220	--
	9/29/2003	N	--	< 0.05 U	2.87	3	1.7	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,100	--
	10/27/2003	N	--	< 0.05 U	2.99	3.16	0.9	--	1.4	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,100	--
	12/4/2003	N	--	< 0.05 U	3.19	3.18	2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,030	--
	1/5/2004	N	--	< 0.05 U	3.12	3.33	1.8	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,050	--
	3/1/2004	N	--	< 0.05 U	3.77	3.18	1.7	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,110	--
	3/31/2004	N	--	< 0.01 U	3.85	3.66	3	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,100	4,440
	5/4/2004	N	--	< 0.01 U	3.38	3.73	2.9	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,250	--
	6/7/2004	N	--	< 0.01 U	3.82	3.93	4	--	< 0.1 U	3.4	0.06	0.11	--	--	--	--	--	--	1,000	--
	7/7/2004	N	--	< 0.01 U	7.74	4.08	2	--	< 0.25 U	1.01	0.12	0.08	--	--	--	--	--	--	1,100	--
	8/10/2004	N	--	< 0.01 U	3.83	3.83	2.6	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,120	--
	9/16/2004	N	--	< 0.01 U	3.84	3.83	1.6	--	< 0.1 U	0.1	0.06	0.06	--	--	--	--	--	--	1,050	--
	10/4/2004	N	--	< 0.01 U	3.75	3.75	1.3	--	< 0.1 U	0.1	0.06	0.07	--	--	--	--	--	--	1,040	--
	11/8/2004	N	--	< 0.01 U	3.75	3.75	0.6	--	< 0.4 U	< 0.4 U	0.09	0.09	--	--	--	--	--	--	1,070	4,730
	12/16/2004	N	--	< 0.01 U	3.56	3.51	1.9	--	< 0.4 U	< 0.4 U	0.13	0.13	--	--	--	--	--	--	1,100	4,830
	1/6/2005	N	--	< 0.01 U	2.83	3.31	4.6	--	< 0.4 U	0.61	0.18	0.22	--	--	--	--	--	--	1,110	4,520
	2/7/2005	N	--	< 0.01 U	2.66	2.77	2.2	--	< 0.4 U	< 0.4 U	0.6	0.59	--	--	--	--	--	--	1,090	4,830
	3/8/2005	N	--	< 0.01 U	1.73	1.95	1.4	--	< 0.4 U	0.92	0.95	1.13	--	--	--	--	--	--	1,040	4,570
	4/6/2005	N	--	< 0.01 U	0.182	1.49	< 0.005 U	--	3.23	3.66	1.79	1.91	--	--	--	--	--	--	1,040	4,510
	5/10/2005	N	--	< 0.01 U	0.1	0.42	< 0.01 U	--	< 0.4 U	2.13	2.25	2.21	--	--	--	--	--	--	1,040	4,450
	6/7/2005	N	--	< 0.01 U	0.09	0.21	< 0.05 U	--	1.23	1.52	2.14	2.24	--	--	--	--	--	--	1,060	4,320
	7/6/2005	N	--	< 0.02 U	0.11	0.13	< 0.01 U	--	< 0.8 U	22.3	1.71	1.75	--	--	--	--	--	--	1,330	4,900
	8/2/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/9/2006	N	--	0.0329	--	0.205	--	< 0.08 U	--	29.5	2.36	2.36	< 25 U	< 25 U	< 25 U	< 75 U	< 1.2 U	< 6 U	996	4,190
	7/18/2006	N	--	0.0236	--	0.151	--	< 0.02 U	--	11.5	1.09	1.09	< 5 U	< 5 U	< 5 U	< 15 U	6.5	0.6	1,020	4,580
	4/3/2007	N	--	0.0753	--	0.204	--	< 0.2 U	--	70.6	1.49	1.49	< 5 U	< 1 U	< 1 U	< 3 U	20	2.2	1,010	--
	4/15/2008	N	--	0.0981	--	0.18	--	< 1 U	--	113	1.54	1.54	< 25 U	< 25 U	< 25 U	< 75 U	56	2.4	1,030	6,460
	3/26/2009	N	--	0.106	--	0.149	--	< 0.2 U	--	155	1.84	1.84	< 5 U	< 5 U	< 5 U	< 15 U	56	1.2	1,130	7,330
	3/10/2010	N	--	< 0.25 U	--	< 0.250 U	--	0.134	--	0.755	1.25	1.25	< 1 U	< 1 U	< 1 U	< 1 U	5.93	0.79	658	6,880
	5/25/2012	N	0.105	--	0.0721	--	--	0.633	4.42	--	0.458	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	912	5,880
	5/16/2013	N	0.0802	--	0.0863	--	--	0.0141	4.62	--	0.156	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	793	4,850
	5/8/2014	N	0.0686	--	0.0851	--	--	< 0.0500 U	2.53	--	0.0321 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	808	4,060
	6/3/2015	N	0.037	--	0.0728	--	--	< 0.0100 U	1.05 J	--	0.0653	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	894	3,820
	5/20/2016	N	0.037	--	0.0655	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	585	2,690
	5/4/2017	N	0.0618	--	0.0767	--	< 0.01 U	--	17	--	0.176	--	--	--	--	--	--	--	771	2,740
	10/1/2001	N	--	--	4.65	--	--	2.8	< 0.1 U	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,500	4,670
	2/4/2002	N	--	--	5.69	--	4.2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,600	5,190
	2/4/2002	FD	--	--	3.51	--	2.7	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	910	3,860
	6/9/2003	N	--	< 0.05 U	2.57	5.43	7.43	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,500	--
	6/9/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,490	--
	6/30/2003	N	--	< 0.05 U	5.29	5.24	4.07	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	7/9/2003	N	--	< 0.05 U	5.37	4.29	4.36	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	7/15/2003	N	--	< 0.05 U	5.52	5.78	5.2	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	7/29/2003	N	--	< 0.05 U	5.72	5.33	3	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	8/21/2003	N	--	< 0.05 U	5.36	5.32	4.5	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	9/29/2003	N	--	< 0.05 U	5.36	5.7	2.3	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	10/27/2003	N	--	< 0.05 U	5.33	5.49	4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	12/4/2003	N	--	< 0.05 U	5.92	5.77	2.6	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,500	--
	1/6/2004	N	--	< 0.05 U	5.56	5.45	1.2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,600	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW008M	3/1/2004	N	--	< 0.05 U	5.22	5.29	2.7	--	< 0.1 U	0.2	0.12	< 0.05 U	--	--	--	--	--	--	1,500	--	
	4/1/2004	N	--	< 0.01 U	4.88	3.18	2.7	--	< 0.1 U	1.4	< 0.05 U	0.2	--	--	--	--	--	--	1,500	5,010	
	5/4/2004	N	--	< 0.01 U	5.01	4.91	3.7	--	< 0.1 U	0.5	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,500	--	
	6/7/2004	N	--	0.01	1.81	2.4	1.4	--	< 0.25 U	0.45	0.85	0.91	--	--	--	--	--	--	1,370	--	
	7/7/2004	N	--	0.04	0.18	0.44	< 0.005 U	--	5.23	6.71	4.84	5.05	--	--	--	--	--	--	1,400	--	
	8/10/2004	N	--	0.04	1.99	1.78	< 0.005 U	--	1.1	0.4	3.57	3.58	--	--	--	--	--	--	1,400	--	
	9/16/2004	N	--	< 0.01 U	0.19	0.75	< 0.005 U	--	1	2.4	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,370	--	
	10/4/2004	N	--	< 0.01 U	0.18	0.59	0.005	--	1.8	7.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,330	--	
	11/9/2004	N	--	< 0.01 U	0.19	0.5	< 0.05 U	--	2.78	19.7	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,380	6,280	
	12/16/2004	N	--	< 0.01 U	0.16	0.22	0.02	--	2.94	11.5	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,400	6,080	
	1/17/2005	N	--	< 0.01 U	0.15	0.17	< 0.005 U	--	19.5	24.2	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,460	6,350	
	2/8/2005	N	--	< 0.01 U	0.13	0.13	< 0.005 U	--	22.8	26.7	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,470	5,890	
	3/8/2005	N	--	0.01	0.12	0.14	0.06	--	13.2	19.6	3.66	3.57	--	--	--	--	--	--	1,480	5,410	
	4/6/2005	N	--	0.01	0.1	0.13	< 0.005 U	--	9.59	11.5	1.46	1.53	--	--	--	--	--	--	1,320	5,050	
	5/11/2005	N	--	< 0.01 U	0.1	0.1	< 0.01 U	--	< 0.4 U	8.69	1.71	1.56	--	--	--	--	--	--	1,380	5,070	
	6/7/2005	N	--	< 0.01 U	0.09	0.1	< 0.01 U	--	0.45	6.64	1.53	1.57	--	--	--	--	--	--	1,370	5,270	
	7/6/2005	N	--	< 0.01 U	0.1	0.37	< 0.01 U	--	--	2.54	2.12	2.14	--	--	--	--	--	--	1,050	4,150	
	8/2/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/10/2006	N	--	0.0244	--	0.215	--	< 0.08 U	--	17.4	4.99	4.99	< 10 U	< 10 U	< 10 U	< 30 U	< 12 U	< 66 U	1,300	7,160	
	2/10/2006	FD	--	0.0229	--	0.219	--	< 0.08 U	--	17.6	5.2	5.2	< 10 U	< 10 U	< 10 U	< 30 U	< 12 U	< 64 U	1,330	7,400	
	7/19/2006	N	--	< 0.02 U	--	0.165	--	< 0.02 U	--	5.26	3.79	3.79	< 5 U	< 5 U	< 5 U	< 15 U	14	1	1,290	5,980	
	4/13/2007	N	--	0.0261	--	0.163	--	< 0.02 U	--	55.8	0.869	0.869	< 2 U	< 1 U	< 1 U	< 3 U	18	1.3	1,200	--	
	4/16/2008	N	--	0.0322	--	0.153	--	< 1 U	--	31	0.457	0.457	< 2 U	< 1 U	< 1 U	< 3 U	10	0.64	1,280	5,730	
	3/31/2009	N	--	0.0458	--	0.145	--	< 0.2 U	--	22.8	0.318	0.318	< 5 U	< 5 U	< 5 U	< 15 U	2.5	< 0.25 U	1,230	5,300	
	3/10/2010	N	--	< 0.25 U	--	< 0.25 U	--	0.16	--	3.99	< 0.25 U	< 0.25 U	< 1 U	< 1 U	< 1 U	< 1 U	1	< 0.05 U	934	3,940	
	5/25/2012	N	< 0.0100 U	--	0.0299	--	--	0.0389	17.4	--	2.2	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,370	5,220	
	5/20/2013	N	< 0.0200 U	--	0.00812 J	--	--	< 0.100 U	14.6	--	3.01	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,370	5,100	
	5/6/2014	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0500 U	69.5	--	3.33	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,330	5,390	
	5/6/2014	FD	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0500 U	82.5	--	3.3	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,330	5,390	
	6/3/2015	N	< 0.0200 U	--	0.00820 J	--	--	< 0.0500 U	73.3 J	--	3.25	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,630	5,680	
	5/20/2016	N	0.00587 J	--	0.00633 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	1,010	5,070	
	5/4/2017	N	0.00325	--	0.0101	--	< 0.01 U	--	59.9	--	3.11	--	--	--	--	--	--	--	1,390	4,730	
	9/22/2017	N	0.0032	--	0.00823	--	< 0.01 U	--	56.5	--	3.23	--	--	--	--	--	--	--	1,250	4,930	
	4/4/2018	Reg	--	0.00803	--	0.0219	--	< 0.0100 U	107	--	--	2.96	--	--	--	--	--	--	1,470	4,580	
	4/4/2018	FD	--	0.00222	--	0.00842	--	< 0.0100 U	91.3	--	--	3.23	--	--	--	--	--	--	1,490	3,820	
	9/14/2018	Reg	0.00312 J	--	0.00775	--	< 0.0100 U	--	--	40.4	3.08	--	--	--	--	--	--	--	1,350	4,600	
MW009	8/20/1997	N	< 0.10 U	--	0.26	--	--	--	--	--	--	--	2	< 1 U	< 1 U	< 1 U	--	--	--	--	
	9/16/1997	N	--	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/21/1999	N	< 0.10 U	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	410	2,000	
	11/18/1999	N	--	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	410	2,000	
	5/31/2001	N	--	< 0.05 U	--	0.08	--	0.095	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	560	2,760	
	1/29/2002	N	--	--	0.1	--	0.1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	630	2,710	
	9/17/2002	N	--	--	0.22	--	0.16	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	530	--	
	12/19/2002	N	--	--	--	--	0.097	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	0.63	< 0.05 U	550	--	
	3/13/2003	N	--	--	--	--	0.12	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	410	--	
	6/4/2003	N	--	--	--	--	0.092	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	0.3	< 0.05 U	500	--	
	1/20/2004	N	--	--	0.04	--	0.03	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.26 U	< 0.05 U	280	--	
	6/24/2004	N	--	--	0.03	--	0.027	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	240	--	
	1/4/2005	N	--	--	0.19	--	0.17	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	340	--	
	6/6/2005	N	--	--	0.12	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	300	--	
	2/2/2006	N	--	< 0.02 U	--	0.0728	--	0.062	--	0.54	0.007	0.007	< 1 U	< 1 U	< 1 U	< 3 U</					

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW009A	1/6/2003	N	--	--	--	--	0.85	--	--	--	--	--	--	--	--	--	--	--	790	--	
	1/6/2003	FD	--	--	--	--	0.76	--	--	--	--	--	--	--	--	--	--	--	820	--	
	3/20/2003	N	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--	--	--	830	--	
	3/20/2003	FD	--	--	--	--	0.65	--	--	--	--	--	--	--	--	--	--	--	730	--	
	6/4/2003	N	--	--	--	--	1.15	--	--	--	--	--	--	--	--	--	--	--	820	--	
	6/4/2003	FD	--	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--	840	--	
	1/20/2004	N	--	--	1.38	--	1.5	--	--	--	--	--	--	--	--	--	--	--	880	--	
	1/20/2004	FD	--	--	1.36	--	1.2	--	--	--	--	--	--	--	--	--	--	--	860	--	
	7/8/2004	N	--	--	0.14	--	0.28	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	370	--	
	1/11/2005	N	--	--	1.05	--	0.9	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	740	--	
	6/6/2005	N	--	--	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	840	--	
	2/2/2006	N	--	< 0.02 U	--	0.938	--	0.9	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	644	2,420	
	7/13/2006	N	--	< 0.02 U	--	0.88	--	0.78	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	642	2,530	
	4/4/2007	N	--	< 0.02 U	--	0.916	--	0.84	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	356	--	
	4/15/2008	N	--	< 0.02 U	--	0.902	--	0.92	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	706	2,580	
	3/26/2009	N	--	< 0.02 U	--	0.803	--	0.86	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	683	2,410	
	3/8/2010	N	--	< 0.05 U	--	0.884	--	0.792	--	< 0.03 U	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.053 U	< 0.05 U	547	2,240	
	5/22/2012	N	< 0.0100 U	--	0.63	--	0.63	< 0.200 U	--	0.023	--	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	536 J	2,040	
	9/6/2012	N	--	--	--	0.615	--	0.634	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--	--
	5/15/2013	N	0.00949 J	--	0.633	--	--	0.638	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	524	2,080	
	10/24/2013	N	--	--	--	0.549	--	0.552 J	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--	--
	5/27/2014	N	0.0102 J	--	0.204	--	--	0.176	< 0.200 U	--	0.312	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	497	1,890	
	6/1/2015	N	< 0.0200 U	--	0.00162 J	--	--	< 0.0100 U	< 0.200 U	--	1.4	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	425	1,900	
	5/19/2016	N	< 0.00336 U	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	360	1,740	
	5/4/2017	N	0.00378	--	< 0.00684 UB	--	< 0.01 U	--	0.0912	--	1.03	--	--	--	--	--	--	--	447	1,780	
MW010	9/16/1997	N	< 0.10 U	--	0.14	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	520	2,400	
	1/19/1999	N	< 0.10 U	--	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	3,100	
	11/18/1999	N	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	3,800	
	5/24/2001	N	--	< 0.05 U	--	0.22 < 0.05 U	--	0.28 0.036	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,800	5,130	
	1/29/2002	N	--	--	0.35	--	0.17	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,700	4,750	
	9/17/2002	N	--	--	0.27	--	0.21	--	--	--	--	--	--	--	--	--	--	--	1,700	--	
	12/30/2002	N	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	2,100	--	
	3/17/2003	N	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	2,200	--	
	6/2/2003	N	--	--	--	--	0.152	--	--	--	--	--	--	--	--	--	--	--	2,200	--	
	1/21/2004	N	--	--	0.01	--	0.009	--	--	--	--	--	--	--	--	--	--	--	1,140	--	
	6/23/2004	N	--	--	0.01	--	0.011	--	--	--	--	--	--	--	--	--	--	--	1,250	--	
	1/3/2005	N	--	--	0.08	--	0.04	--	--	--	--	--	--	--	--	--	--	--	2,090	--	
	6/6/2005	N	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	2,060	--	
	1/24/2006	N	--	< 0.02 U	--	0.0586	--	0.055	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	2,200	5,780	
	6/30/2006	N	--	< 0.02 U	--	0.062	--	0.048	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.15	< 0.05 U	2,220	5,850	
	6/30/2006	FD	--	< 0.02 U	--	0.0598	--	0.06	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.1	< 3 U	0.15	< 0.05 U	2,250	5,970	
	4/11/2007	N	--	< 0.02 U	--	0.0483	--	0.043	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	2,170	--	
	9/18/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--	--
	9/19/2007	N	--	--	--	0.0445	--	0.023	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	2,430	--	
	4/7/2008	N	--	< 0.02 U	--	0.0517	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	4.1	1.1	< 1 U	< 3 U	< 0.1 U	< 0.05 U	2,300	5,140	
	8/13/2008	N	--	0.024	--	0.0511	--	< 0.02 U	--	< 0.2 U	0.0071	0.0071	4.2	5.5	13	< 3 U	< 0.1 U	0.059	2,570	5,460	
	3/26/2009	N	--	< 0.02 U	--	0.0412	--	0.033	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	2,590	5,670	
	8/19/2009	N	--	< 0.02 U	--	0.0387	--	0.028	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.66	< 0.05 U	2,960	--	
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.04	--	0.097	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.191	< 0.05 U	2,390	5,410	
	8/6/2010	N	--	0.013	--	< 0.05 U	--	0.046	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.193	< 0.05 U	2,350	7,090	
	5/21/2012	N	< 0.0100 U	--	0.0594	--	--	0.0592	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	2,570	7,250	
	10/26/2012	N	--	< 0.0100 U	--	0.0524	--	0.048	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	2,680	6,400	
	5/17/2013	N	0.0107 J	--	0.																

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW011	5/31/2001	N	--	< 0.05 U	--	4.4	--	6.3	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,600	4,950
	8/30/2001	N	--	--	4.15 4.12	4.25 4.21	2.6 2.8	2.6 2.6	< 0.1 U	0.1	--	--	--	--	--	--	--	--	--	--
	1/31/2002	N	--	--	4.6	--	3.7	--	< 0.1 U	0.5	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,500	4,770
	9/19/2002	N	--	--	4.76	--	2.3	--	--	--	--	--	--	--	--	--	--	--	1,300	4,980
	1/7/2003	N	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	1,190	--
	3/26/2003	N	--	--	--	--	3.4	--	--	--	--	--	--	--	--	--	--	--	1,240	--
	6/2/2003	N	--	--	--	--	3.67	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	6/10/2003	N	--	< 0.05 U	4.53	4.67	3.97	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,220	--
	7/1/2003	N	--	< 0.05 U	4.85	4.41	3.91	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	7/8/2003	N	--	< 0.05 U	4.64	4.51	3.92	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	7/14/2003	N	--	< 0.05 U	4.4	4.4	3.94	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,210	--
	7/29/2003	N	--	< 0.05 U	4.88	5.02	4	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	8/19/2003	N	--	< 0.05 U	4.26	4.33	3.4	--	< 0.1 U	< 0.1 U	0.1	0.1	--	--	--	--	--	--	1,200	--
	9/29/2003	N	--	< 0.05 U	4.49	4.4	2.2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	10/28/2003	N	--	< 0.05 U	4.34	4.52	3.4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	12/8/2003	N	--	< 0.05 U	4.47	4.36	3	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,170	--
	1/6/2004	N	--	< 0.05 U	4.45	4.68	1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	3/2/2004	N	--	< 0.05 U	4.08	4.06	3 2.9	--	< 0.1 U	0.6	< 0.05 U	1.75	--	--	--	--	--	--	1,070	--
	4/1/2004	N	--	0.01	4.3	4.28	1.4	--	< 0.1 U	< 0.1 U	0.06	< 0.05 U	--	--	--	--	--	--	1,230	4,820
	5/13/2004	N	--	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/18/2004	N	--	< 0.01 U	4.11	4.31	2.6	--	< 0.1 U	0.5	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	6/10/2004	N	--	--	--	--	2.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/2004	N	--	< 0.01 U	3.79	3.93	2.6	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,000	--
	7/8/2004	N	--	--	--	--	3.2	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/13/2004	N	--	< 0.01 U	3.04	3.96	3.6	--	< 0.1 U	0.3	0.09	< 0.05 U	--	--	--	--	--	--	1,200	--
	8/11/2004	N	--	--	--	--	1.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/12/2004	N	--	< 0.01 U	3.56	3.92	2.8	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,000	--
	9/14/2004	N	--	--	--	--	1.7	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/15/2004	N	--	< 0.01 U	3.94	4.21	1.7	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	10/5/2004	N	--	< 0.01 U	3.98	3.88	1.3 1.8	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,160	--
	10/6/2004	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/2004	N	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/2004	N	--	< 0.01 U	4.1	3.87	--	2.9	< 0.2 U	0.89	0.05	0.05	--	--	--	--	--	--	1,060	4,490
	12/20/2004	N	--	--	--	--	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/2004	N	--	< 0.01 U	3.77	3.86	2	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,200	4,590
	1/25/2005	N	--	< 0.01 U	3.44	3.14	2.6	--	< 0.4 U	< 0.4 U	< 0.01 U	0.01	--	--	--	--	--	--	1,100	4,560
	2/8/2005	N	--	< 0.01 U	2.97	2.79	1.1	--	< 0.4 U	< 0.4 U	0.01	0.01	--	--	--	--	--	--	1,050	4,690
	3/9/2005	N	--	< 0.01 U	2.91	2.92	2.3	--	< 0.4 U	< 0.4 U	0.01	0.01	--	--	--	--	--	--	1,160	4,550
	4/12/2005	N	--	< 0.01 U	0.42	0.43	3	--	1.2	4.13	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,600	11,200
	5/12/2005	N	--	< 0.01 U	3.35	3.38	3.1	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,400	5,000
	6/8/2005	N	--	< 0.01 U	3.19	3.08	3.3	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,530	5,270
	7/11/2005	N	--	< 0.01 U	3.24	3.52	4.4	--	< 0.4 U	< 0.4 U	0.03	0.04	--	--	--	--	--	--	1,670	5,310
	2/9/2006	N	--	< 0.02 U	--	3.9	--	3.2	--	0.94	0.187	0.187	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,450	5,230
	7/19/2006	N	--	< 0.02 U	--	3.81	--	3.5	--	< 0.2 U	0.11	0.11	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	1,360	5,280
	3/29/2007	N	--	< 0.02 U	--	4.15	--	3.3	--	< 0.2 U	0.0204	0.0204	1.3	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1,200	--
	4/16/2008	N	--	< 0.02 U	--	3.59	--	0.86	--	< 0.2 U	0.0333	0.0333	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	1,660	5,040
	3/31/2009	N	--	< 0.02 U	--	3.67	--	3.8	--	< 0.2 U	0.0337	0.0337	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	1,380	5,530
	3/10/2010	N	--	< 0.05 U	--	0.086	--	0.015	--	0.052	0.486	0.486	< 1 U	< 1 U	< 1 U	< 1 U	0.086	< 0.05 U	1,010	4,630
	5/22/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	0.0398	5.23	--	2.87	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,130	4,590
	5/20/2013	N	0.0108 J	--	0.0143	--	--	< 0.100 U	0.598	--	1.9	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1130 E	3,430
	5/8/2014	N	0.00881 J	--	0.00830 J	--	--	< 0.0500 U	2.59	--	4.3	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,190	3,700
	6/3/2015	N	< 0.0200 U	--	0.00385 J	--	--	< 0.0100 U	5.66 J	--	4.42	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,170	4,640
	5/20/2016	N	0.0105	--	0.00528 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	876	4,180
	5/5/2017	N	0.0896 J	--	0.00934	--	< 0.01 U	--	113 J	--	1.49	--	--	--	--	--	--	--	1,600	4,370
	5/5/2017	FD	0.00802 J	--	< 0.00476 UB	--	< 0.01 U	--	16.5 J	--	1.64	--	--	--	--	--	--	--	1,580	4,630
	10/23/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	210	940
	1/20/1999	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	170	930
	5/22/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.029	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	210	840
	1/28/2002	N	--	--	0.11	--	0.104	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	210	1000
	9/12/2002	N	--	--	0.38	--	0.3	--	--	--	--	--	--	--	--	--	--	--	270	--
	12/26/2002	N	--	--	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	320	--
	3/18/2003	N	--	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	220	--
	6/2/2003	N	--	--	--	--	0.398	--	--	--	--	--	--	--	--	--	--	--	320	--
	6/10/2003	N	--	< 0.05 U	0.38	0.4	0.354	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	340	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW011A	6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	340	--
	7/1/2003	N	--	< 0.05 U	0.41	0.39	0.263	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	200	--
	7/8/2003	N	--	< 0.05 U	0.32	0.34	0.223	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	290	--
	7/14/2003	N	--	< 0.05 U	0.25	0.29	0.045	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	300	--
	7/29/2003	N	--	< 0.05 U	0.14	0.21	< 0.005 U	--	< 0.1 U	< 0.1 U	0.09	0.09	--	--	--	--	--	--	340	--
	8/19/2003	N	--	< 0.05 U	0.12	0.17	< 0.005 U	--	0.1	0.2	0.21	0.23	--	--	--	--	--	--	320	--
	9/29/2003	N	--	< 0.05 U	0.09	0.13	< 0.005 U	--	0.2	0.2	0.28	0.28	--	--	--	--	--	--	340	--
	10/28/2003	N	--	< 0.05 U	0.09	0.13	< 0.005 U	--	< 0.1 U	0.2	0.2	0.21	--	--	--	--	--	--	300	--
	12/8/2003	N	--	< 0.05 U	0.1	0.12	0.061	--	0.1	< 0.1 U	0.14	0.15	--	--	--	--	--	--	310	--
	1/6/2004	N	--	< 0.05 U	0.16	0.19	0.068	--	< 0.1 U	< 0.1 U	0.12	0.12	--	--	--	--	--	--	400	--
	3/4/2004	N	--	< 0.05 U	1.07	< 0.05 U	0.6	--	< 0.1 U	11.5	0.43	0.22	--	--	--	--	--	--	710	--
	4/1/2004	N	--	0.01	3.69	3.62	2.6	--	< 0.1 U	< 0.1 U	0.17	0.16	--	--	--	--	--	--	1,300	5,220
	5/13/2004	N	--	--	--	--	3.2	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/18/2004	N	--	< 0.01 U	2.75	2.84	3.2	--	< 0.1 U	< 0.1 U	0.09	0.09	--	--	--	--	--	--	1,210	--
	6/10/2004	N	--	--	--	--	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/2004	N	--	< 0.01 U	2.64	3.18	2.8	--	< 0.1 U	0.7	0.07	0.08	--	--	--	--	--	--	1,400	--
	7/8/2004	N	--	--	--	--	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	N	--	0.01	2.04	2.37	1.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	920	--
	8/11/2004	N	--	--	--	--	1.7	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/12/2004	N	--	< 0.01 U	2.73	3.5	1.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	900	--
	9/15/2004	N	--	< 0.01 U	2.13	2.45	1.3 1.4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	810	--
	10/5/2004	N	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2004	N	--	< 0.01 U	1.69	1.67	1.4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	640	--
	11/11/2004	N	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/2004	N	--	< 0.01 U	2.23	2.24	7.6	--	< 0.2 U	< 0.2 U	0.03	0.03	--	--	--	--	--	--	790	3,370
	12/20/2004	N	--	--	--	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/2004	N	--	< 0.01 U	1.87	1.71	0.8	--	< 0.4 U	< 0.4 U	0.02	0.02	--	--	--	--	--	--	710	2,950
	1/19/2005	N	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/25/2005	N	--	< 0.01 U	3.22	3.17	--	--	< 0.4 U	< 0.4 U	0.02	0.02	--	--	--	--	--	--	1,200	4,390
	2/8/2005	N	--	< 0.01 U	3.55	3.27	3.2	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,270	4,790
	3/9/2005	N	--	< 0.01 U	4.04	4	3.4	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,310	5,150
	4/1/2005	N	--	< 0.01 U	3.89	3.91	3	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,330	5,340
	5/11/2005	N	--	< 0.01 U	3.83	3.64	4.8	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,400	5,330
	6/8/2005	N	--	< 0.01 U	3.44	3.47	3.2	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,350	5,260
	7/11/2005	N	--	< 0.01 U	3.55	3.59	4.1	--	< 0.4 U	< 0.4 U	0.03	0.03	--	--	--	--	--	--	1,370	5,310
	2/10/2006	N	--	< 0.02 U	--	3.75	--	3.5	--	< 0.2 U	0.0263	0.0263	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,350	5,320
	7/19/2006	N	--	< 0.02 U	--	4.32	--	4.2	--	< 0.2 U	0.0299	0.0299	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	1,480	5,290
	3/29/2007	N	--	< 0.02 U	--	3.94	--	3.4	--	< 0.2 U	0.0407	0.0407	1.7	< 1 U	< 1 U	< 3 U	0.14	< 0.05 U	1,370	--
	4/16/2008	N	--	< 0.02 U	--	3.88	--	3.8	--	< 0.2 U	0.0441	0.0441	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	1,460	5,640
	3/31/2009	N	--	< 0.02 U	--	3.77	--	3.7	--	< 0.2 U	0.0151	0.0151	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	1,420	6,130
	3/10/2010	N	--	< 0.05 U	--	3.77	--	4.04	--	0.382	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.059 U	< 0.05 U	660	5,430
	5/22/2012	N	< 0.0100 UJ	--	1.82	--	--	1.72 J	< 0.200 U	--	0.0498	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,350	4,720
	5/20/2013	N	< 0.0200 U	--	2.27	--	--	1.94	< 0.200 UJ	--	0.0424	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1250 E	4,540
	5/8/2014	N	0.00886 J	--	0.114	--	--	< 0.0500 U	< 0.200 U	--	2.93	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,260	3,090
	6/3/2015	N	0.00677 J	--	0.22	--	--	0.033	< 0.200 UJ	--	2.31	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,300	5,160
	5/20/2016	N	0.0189	--	1.81	--	1.38	--	--	--	--	--	--	--	--	--	--	--	1,020	4,430
	5/5/2017	N	0.0128 J	--	1.03 J	--	0.976	--	< 0.02 U	--	0.197 J	--	--	--	--	--	--	--	941	3,310
	9/22/2017	N	0.0133	--	0.692	--	0.65	--	< 0.1 U	--	0.182	--	--	--	--	--	--	--	785	3,530
	9/22/2017	FD	0.0134	--	0.707	--	0.645	--	< 0.1 U	--	0.183	--	--	--	--	--	--	--	790	2,950
	4/4/2018	Reg	--	0.0119	--	0.371	--	0.329	< 0.100 U	--	--	0.16	--	--	--	--	--	--	729	2,090
	9/14/2018	Reg	0.0142	--	0.291	--	0.242	--	--	< 0.100 U	0.193	--	--	--	--	--	--	--	646	2,160
	9/14/2018	FD	0.0136	--	0.277	--	0.239	--	--	< 0.100 U	0.187	--	--	--	--	--	--	--	576	2,080
	10/1/2001	N	--	--	1.84	--	--	1.7	< 0.1 U	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,400	4,710
	2/4/2002	N	--	--	2.43	--	2.2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	5,020
	6/10/2003	N	--	< 0.05 U	2.9	2.81	2.5	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,350	--
	7/1/2003	N	--	< 0.05 U	5.7	3.38	3.02	--	< 0.1 U	< 0.1 U	0.1	0.05	--	--	--	--	--	--	1,500	--
	7/8/2003	N	--	< 0.05 U	3.01	2.94	1.89	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	7/14/2003	N	--	< 0.05 U	3.01	2.93	1.59	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	7/30/2003	N	--	< 0.05 U	3.38	3.26	2.4	--	< 0.1 U	< 0.1 U	0.06	0.06	--	--	--	--	--	--	1,400	--
	8/19/2003	N	--	< 0.05 U	2.95	3.15	1.9	--	< 0.1 U	< 0.1 U	0.12	0.12	--	--	--	--	--	--	1,400	--
	9/29/2003	N	--	< 0.05 U	2.9	2.79	1.3	--	< 0.1 U	< 0.1 U	0.06	0.06	--	--	--	--	--	--	1,600	--
	10/28/2003	N	--	< 0.05 U	2.68	2.8	2.3	--	< 0.1 U	< 0.1 U	0.05	0.05	--	--	--	--	--	--	1,400	--
	12/4/2003	N	--	< 0.05 U	2.98	2.93	1.6	--	< 0.1 U	< 0.1 U	0.06	0.06	--	--	--	--	--	--	1,400	--
	1/6/2004	N	--	< 0.05 U	2.43	2.66	0.69	--	< 0.1 U	< 0.1 U	0.06	< 5 U	--	--	--	--	--	--	1,500	--
	3/2/2004	N	--	< 0.05 U	3.99	4	3.7 3.1	--	< 0.1 U	0.7	0.13	< 0.05 U	--	--	--	--	--	--	1,600	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW011M	4/1/2004	N	--	< 0.01 U	2.65	4.92	1.6	--	< 0.1 U	0.1	0.19	< 0.05 U	--	--	--	--	--	--	1,600	5,840
	5/13/2004	N	--	--	--	--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/18/2004	N	--	< 0.01 U	2.37	2.34	2.4	--	< 0.1 U	< 0.1 U	4.92	4.82	--	--	--	--	--	--	1,800	--
	6/10/2004	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/2004	N	--	< 0.01 U	0.06	0.67	0.037	--	< 0.1 U	7.3	1.88	1.86	--	--	--	--	--	--	700	--
	7/8/2004	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/13/2004	N	--	< 0.01 U	< 0.05 U	0.44	< 0.005 U	--	0.3	3.2	3.32	3.26	--	--	--	--	--	--	1,300	--
	8/11/2004	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/16/2004	N	--	< 0.01 U	< 0.05 U	0.24	< 0.005 U	--	0.2	1	3.42	3.64	--	--	--	--	--	--	900	--
	9/14/2004	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/15/2004	N	--	0.01	0.09	0.15	< 0.02 U	--	3.5	16.4	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,590	--
	10/5/2004	N	--	< 0.01 U	0.18	0.17	< 0.005 U	--	17.7	17.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,570	--
	10/6/2004	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/2004	N	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/2004	N	--	0.04	0.11	0.15	< 0.005 U	--	< 0.2 U	14.1	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,320	5,870
	12/20/2004	N	--	--	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/2004	N	--	< 0.01 U	0.23	0.2	< 0.005 U	--	50.1	52.9	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,550	7,850
	1/25/2005	N	--	< 0.01 U	0.27	0.29	< 0.005 U	--	< 0.4 U	2.62	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,600	9,010
	2/9/2005	N	--	< 0.01 U	0.02	0.06	< 0.005 U	--	< 0.4 U	2.18	0.64	0.81	--	--	--	--	--	--	1,580	10,000
	3/9/2005	N	--	< 0.01 U	0.42	0.42	< 0.02 U	--	0.75	2.22	23.8	34.4	--	--	--	--	--	--	1,490	11,000
	4/12/2005	N	--	< 0.01 U	3.13	3.28	< 0.05 U	--	< 0.4 U	< 0.4 U	0.02	0.02	--	--	--	--	--	--	1,600	4,990
	5/12/2005	N	--	< 0.01 U	0.43	0.41	< 0.05 U	--	5.18	7.98	8.4	7.85	--	--	--	--	--	--	1,620	9,670
	6/8/2005	N	--	< 0.05 U	0.39	0.44	< 0.05 U	--	6.4	10.5	3	3.33	--	--	--	--	--	--	1,180	8,280
	7/11/2005	N	--	< 0.05 U	< 0.5 U	0.42	< 0.05 U	--	< 20 U	15.5	1.3	2.81	--	--	--	--	--	--	1,590	7,400
	2/10/2006	N	--	< 0.02 U	--	0.319	--	< 0.08 U	--	6.61	0.985	0.985	< 10 U	< 10 U	< 10 U	< 30 U	< 1.2 U	< 12 U	1,540	6,120
	7/19/2006	N	--	0.0203	--	0.267	--	< 0.02 U	--	< 0.2 U	0.128	0.128	< 5 U	< 5 U	< 5 U	< 15 U	1.7	< 0.25 U	1,470	5,640
	7/19/2006	FD	--	0.0225	--	0.266	--	< 0.02 U	--	< 0.2 U	0.131	0.131	< 5 U	< 5 U	< 5 U	< 15 U	1.8	< 0.25 U	1,400	5,500
	3/29/2007	N	--	0.0327	--	0.205	--	< 0.2 U	--	< 0.275 U	0.0449	0.0449	< 5 U	1.2	< 1 U	< 3 U	0.86	< 0.05 U	1,410	--
	4/16/2008	N	--	< 0.02 U	--	0.092	--	< 1 U	--	5.71	0.869	0.869	< 2 U	< 1 U	< 1 U	< 3 U	0.56	< 0.05 U	1,370	4,680
	3/31/2009	N	--	< 0.02 U	--	0.0672	--	< 0.2 U	--	6.21	0.628	0.628	< 5 U	< 5 U	< 5 U	< 15 U	0.3	< 0.25 U	1,330	5,250
	3/10/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.1 U	--	0.547	0.786	0.786	< 1 U	< 1 U	< 1 U	< 1 U	0.139	0.158	2,040	3,820
	5/22/2012	N	< 0.0100 UJ	--	0.039	--	--	0.0188 J	0.352	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,420	4,340
	5/20/2013	N	< 0.0200 U	--	0.0189	--	--	< 0.100 U	0.173 J	--	0.00474 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1290 E	4,400
	5/6/2014	N	< 0.0200 U	--	0.0216	--	< 0.0500 U	--	0.267	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,240	4,720
	6/4/2015	N	0.0110 J	--	0.0209	--	< 0.0500 U	--	< 0.200 UJ	--	0.0169 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,460	4,940
	5/20/2016	N	0.00449 J	--	0.0308	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	1,000	4,910
	5/5/2017	N	0.00253 J	--	0.0202 J	--	< 0.01 U	--	2.28 J	--	0.0305 J	--	--	--	--	--	--	--	1,360	3,970
MW012	2/19/1999	N	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	850	3,500
	11/18/1999	N	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	820	4,300
	11/18/1999	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	760	2,900
	5/30/2001	N	--	< 0.05 U	--	3.35	--	2.5	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	910	4,020
	5/30/2001	FD	--	< 0.05 U	--	3.3	--	2.4	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	800	4,020
	8/27/2001	N	--	--	2.99	3.06	3.4	2.1	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	--	--
					3.02	3.06	3.3	4.6												
	1/31/2002	N	--	--	3.15	--	2.5	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	960	3,780
	1/31/2002	FD	--	--	1.24	--	2.2	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	960	3,840
	9/18/2002	N	--	--	3.82	--	2.2	--	--	--	--	--	--	--	--	--	--	--	830	--
	1/6/2003	N	--	--	--	--	1.3	--	--	--	--	--	--	--	--	--	--	--	540	--
	3/26/2003	N	--	--	--	--	2.5	--	--	--	--	--	--	--	--	--	--	--	820	--
	6/3/2003	N	--	--	--	--	2.32	--	--	--	--	--	--	--	--	--	--	--	670	--
	6/10/2003	N	--	< 0.05 U	2.84	2.96	2.64	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	780	--
	7/2/2003	N	--	< 0.05 U	2.39	2.54	2.14	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	680	--
	7/7/2003	N	--	< 0.05 U	3.08	3	2.67	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	760	--
	7/14/2003	N	--	< 0.05 U	3.24	3.64	2.97	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	680	--
	7/30/2003	N	--	< 0.05 U	3.42	3.28	2.5	--	< 0.1 U	0.7	< 0.05 U	< 0.05 U	--	--	--	--	--	--	770	--
	8/20/2003	N	--	< 0.05 U	1.54	1.66	0.7	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	730	--
	9/30/2003	N	--	< 0.05 U	3.87	3.95	2.8	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	800	--
	10/28/2003	N	--	< 0.05 U	4.12	4.27	3.2	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	800	--
	12/8/2003	N	--	< 0.05 U	3.19	3.29	1.2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	680	--
	1/7/2004	N	--	< 0.05 U	2.67	2.82	0.6	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	3,090
	2/18/2004	N	--	< 0.05 U	2.18	3.76	0.79	--	< 0.1 U	0.5	< 0.05 U	< 0.05 U	--	--	--	--	--	--	760	--
	4/6/2004	N	--	0.01	2.67	2.98	1.4	--	< 0.1 U	0.4	< 0.05 U	< 0.05 U	--	--	--	--	--	--	820	--
	5/6/2004	N	--	0.01	2.7	2.94	1.1	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	930	--
	6/8/2004	N	--	0.02	2.84	3.29	2	--	< 0.1 U	0.6	< 0.05 U	< 0.05 U	--	--	--	--	--	--	830	--
	7/13/2004	N	--	0.01	2.51	2.95	2.5	--	< 0.1 U	1.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	750	--
	8/12/2004	N	--	0.01	2.98	3.49	1.4	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	800	--
	9/9/2004	N	--	0.01	2.35	3.08	1.3	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	730	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	10/6/2004	N	--	< 0.01 U	1.52	1.47	0.5	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	560	--	
	11/10/2004	N	--	< 0.01 U	1.57	1.42	0.018	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	600	2,960	
	12/28/2004	N	--	< 0.01 U	1.39	1.24	0.9	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	600	2,850	
	1/18/2005	N	--	< 0.01 U	1.4	1.47	1.3	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	640	2,700	
	2/9/2005	N	--	< 0.01 U	1.8	2.9	0.9	--	< 4 U	< 4 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	710	3,180	
	3/10/2005	N	--	< 0.01 U	1.55	1.34	0.6	--	< 0.4 U	0.57	< 0.01 U	0.01	--	--	--	--	--	--	540	2,970	
	4/13/2005	N	--	< 0.01 U	1.45	1.92	0.51	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	560	2,860	
	5/17/2005	N	--	< 0.01 U	1.25	1.14	0.63	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	520	2,770	
	6/9/2005	N	--	< 0.01 U	1.2	1.44	1.7	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	560	2,950	
	7/11/2005	N	--	< 0.01 U	1.18	1.27	1.2	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	510	2,860	
	2/10/2006	N	--	< 0.02 U	--	0.104	--	0.083	--	< 0.2 U	0.0798	0.0798	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	439	2,480	
	7/20/2006	N	--	< 0.02 U	--	0.0284	--	< 0.02 U	--	11.1	0.95	0.95	< 1 U	< 1 U	< 1 U	< 3 U	0.44	0.063	408	2,160	
	4/2/2007	N	--	< 0.02 U	--	0.079	--	< 0.02 U	--	1.54	0.0517	0.0517	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	436	--	
	4/17/2008	N	--	0.0316	--	< 0.015 U	--	< 0.5 U	--	18.7	4.05	4.05	< 5 U	< 5 U	< 5 U	< 5 U	0.56	< 0.25 U	848	2,640	
	4/1/2009	N	--	0.0335	--	< 0.015 U	--	< 0.02 U	--	5.95	6.9	6.9	< 1 U	< 1 U	< 1 U	< 3 U	0.39	< 0.05 U	447	2,220	
	3/11/2010	N	--	0.053	--	< 0.050 U	--	< 0.10 U	--	0.376	5.76	5.76	< 1 U	< 1 U	< 1 U	< 1 U	0.31	< 0.05 U	320	1,900	
	5/22/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	0.0466	17.4	--	2.33	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	768	2,980	
	5/21/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.100 U	< 0.200 UJ	--	5.81	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	399	2,050	
	5/28/2014	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	1.73	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	446	1,980	
	5/26/2015	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	2.81	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	425	1,740	
	5/13/2016	N	0.045	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	526	2,110	
	5/5/2017	N	0.0149	--	< 0.004 U	--	< 0.01 U	--	3.08	--	4.29	--	--	--	--	--	--	--	469	2,080	
	MW012A	11/4/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	74	480
		5/22/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	80	500
		1/28/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	530
9/5/2002		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--	
12/19/2002		N	--	--	--	--	< 0.005 U	0.02	--	--	--	--	--	--	--	--	--	--	71	--	
3/3/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	87	--	
5/21/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	64	--	
6/10/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	54	--	
6/10/2003		FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	53	--	
7/2/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	57	--	
7/7/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	50	--	
7/14/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	--	
7/30/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	0.35	--	0.2	0.2	0.18	0.18	--	--	--	--	--	--	60	--	
8/20/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	0.4	0.3	0.25	0.22	--	--	--	--	--	--	70	--	
9/30/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	0.1	0.3	0.21	0.21	--	--	--	--	--	--	67	--	
10/28/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	0.1	0.3	0.26	0.25	--	--	--	--	--	--	60	--	
12/9/2003		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	0.1	0.2	0.27	0.27	--	--	--	--	--	--	60	--	
1/7/2004		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	0.1	0.3	0.28	0.29	--	--	--	--	--	--	120	700	
2/19/2004		N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	--	
4/6/2004		N	--	0.01	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	--	
5/6/2004		N	--	0.01	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	--	
6/8/2004		N	--	0.02	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	2.2	< 0.05 U	0.05	--	--	--	--	--	--	60	--	
7/14/2004		N	--	0.02	< 0.05 U	< 0.05 U	0.05	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	70	--	
8/12/2004		N	--	0.03	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	59	--	
9/9/2004		N	--	0.02	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	2.4	< 0.05 U	< 0.05 U	--	--	--	--	--	--	70	--	
10/6/2004		N	--	0.02	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	--	
11/10/2004		N	--	0.02	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.4 U	< 0.4 U	0.01	< 0.01 U	--	--	--	--	--	--	70	530	
12/28/2004		N	--	< 0.01 U	< 0.01 U																

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/22/2015	N	0.00861 J	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	0.00362 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	81.7	453
	5/13/2016	N	0.0158	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	81.8	249
	5/13/2016	FD	0.021	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	83.2	581
	5/5/2017	N	0.0163	--	< 0.004 U	--	< 0.01 U	--	0.0741	--	0.0559	--	--	--	--	--	--	--	85.4	528
MW012M	2/4/2002	N	--	--	1.01	--	0.71	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	550	2,200
	6/10/2003	N	--	< 0.05 U	1.73	1.81	1.57	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	720	--
	6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	830	--
																			460	--
	7/2/2003	N	--	< 0.05 U	1.82	1.81	1.75	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	720	--
	7/7/2003	N	--	< 0.05 U	1.3	1.29	1.23	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	610	--
	7/14/2003	N	--	< 0.05 U	1.51	1.52	1.4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	630	--
	7/30/2003	N	--	< 0.05 U	1.55	1.55	1.1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	710	--
	8/20/2003	N	--	< 0.05 U	2.61	3.12	1.8	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	770	--
	9/30/2003	N	--	< 0.05 U	1.25	1.37	1.4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	600	--
	10/28/2003	N	--	< 0.05 U	1.48	1.48	1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	600	--
	12/9/2003	N	--	< 0.05 U	1.54	1.59	0.61	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	620	--
	1/7/2004	N	--	< 0.05 U	1.12	1.15	0.6	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	600	2,690
	2/19/2004	N	--	< 0.05 U	1.67	1.66	0.76	--	0.2	1.6	< 0.05 U	< 0.05 U	--	--	--	--	--	--	730	--
	4/6/2004	N	--	< 0.01 U	1.73	1.68	0.8	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	720	--
	5/6/2004	N	--	< 0.01 U	1.55	1.54	0.7	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	750	--
	6/8/2004	N	--	< 0.01 U	1.25	1.37	1.4	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	--
	7/14/2004	N	--	0.02	0.6	0.69	0.28	--	< 0.1 U	0.3	0.54	0.58	--	--	--	--	--	--	600	--
	8/12/2004	N	--	0.07	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.2	4.48	4.61	--	--	--	--	--	--	600	--
	9/9/2004	N	--	0.11	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	620	--
	10/6/2004	N	--	0.08	< 0.05 U	0.07	< 0.005 U	--	0.4	0.3	1.8	2.37	--	--	--	--	--	--	540	--
	11/10/2004	N	--	0.06	0.03	0.04	< 0.005 U	--	< 0.4 U	< 0.4 U	2.2	2.82	--	--	--	--	--	--	550	2,420
	12/28/2004	N	--	0.03	0.03	0.04	0.006	--	< 0.4 U	< 0.4 U	1	1.36	--	--	--	--	--	--	630	1,940
	1/18/2005	N	--	0.04	0.03	0.03	< 0.005 U	--	< 0.4 U	< 0.4 U	0.91	1.01	--	--	--	--	--	--	520	1,780
	2/9/2005	N	--	< 0.01 U	0.03	0.02	< 0.005 U	--	< 0.4 U	5.33	0.75	0.65	--	--	--	--	--	--	490	1,880
	3/10/2005	N	--	0.05	0.02	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	0.57	0.61	--	--	--	--	--	--	440	1,870
	4/13/2005	N	--	0.03	0.02	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	0.56	0.61	--	--	--	--	--	--	410	1,860
	5/18/2005	N	--	0.02	0.02	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	0.55	0.54	--	--	--	--	--	--	450	1,750
	6/14/2005	N	--	0.02	0.01	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	0.53	0.67	--	--	--	--	--	--	450	1,850
	7/12/2005	N	--	0.01	0.01	0.03	< 0.005 U	--	< 0.4 U	< 0.4 U	0.54	0.59	--	--	--	--	--	--	440	2,050
	2/13/2006	N	--	0.0393	--	0.255	--	< 2 U	--	271	50.2	50.2	< 50 U	< 50 U	< 50 U	< 150 U	< 60 U	< 450 U	833	12,800
	7/20/2006	N	--	0.0497	--	0.259	--	< 0.02 U	--	514	72.5	72.5	< 50 U	< 50 U	< 50 U	< 150 U	< 950 U	4.9	906	17,100
	4/5/2007	N	--	0.1	--	0.287	--	< 2 U	--	1130	92.6	92.6	< 5 U	< 5 U	< 5 U	< 15 U	140	0.64	871	--
	4/17/2008	N	--	0.139	--	0.124	--	< 2 U	--	899	44.4	44.4	< 20 U	< 20 U	< 20 U	< 60 U	2.89	3.9	781	18,000
	4/1/2009	N	--	0.137	--	0.0782	--	< 0.02 U	--	91.8	2.06	2.06	< 5 U	< 5 U	< 5 U	< 15 U	170	3.1	691	8,270
	3/11/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.131	--	1.23	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	3.86	1.02	279	4,420
	5/22/2012	N	0.0784	--	0.0456	--	--	0.284	8.52	--	0.0954	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	861	5,830
	5/21/2013	N	0.087	--	0.0444	--	--	< 0.100 U	10.1	--	0.142	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	744	4,900
	5/28/2014	N	0.088	--	0.0429	--	< 0.100 U	--	9.14	--	0.119	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	779	5,220
	5/26/2015	N	0.108	--	0.0416	--	< 0.200 U	--	5.35	--	0.0615	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	757	4,480
	5/13/2016	N	0.109	--	0.0413	--	< 0.0548 U	--	--	--	--	--	--	--	--	--	--	--	765	3,360
	5/5/2017	N	0.105	--	0.0411	--	< 0.01 U	--	7.82	--	0.0876	--	--	--	--	--	--	--	752	3,690
	4/4/2018	Reg	--	0.0815	--	0.0351	--	< 0.0100 U	4.76	--	--	0.052	--	--	--	--	--	--	800	3,140
	12/4/1997	N	< 0.10 U	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	4,000
	1/19/1999	N	< 0.10 U	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	4,000
	11/18/1999	N	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	1,200	4,500
	5/23/2001	N	--	< 0.05 U	--	0.31 0.26	--	0.3 0.2	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,700	4,810
	8/27/2001	N	--	--	0.23 0.24	0.22 0.22	< 0.5 U 0.6 < 0.5 U	< 0.5 U < 0.5 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	--	--
	1/29/2002	N	--	--	0.28	--	0.16	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,220	4,360
	9/17/2002	N	--	--	0.41	--	0.33	--	--	--	--	--	--	--	--	--	--	--	930	--
	12/19/2002	N	--	--	--	--	0.35	--	--											

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW013	8/21/2008	N	--	< 0.02 U	--	0.604	--	0.3	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.1	< 3 U	< 0.096 U	< 0.05 U	819	3,480
	4/1/2009	N	--	< 0.02 U	--	0.855	--	0.82	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.1	< 3 U	< 0.096 U	< 0.05 U	771	3,390
	8/10/2009	N	--	< 0.02 U	--	0.83	--	0.84	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	760	3,360
	3/9/2010	N	--	< 0.05 U	--	0.968	--	1.17	--	0.065	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.333	< 0.05 U	717	3,300
	8/9/2010	N	--	< 0.01 U	--	0.915	--	0.119	--	0.165	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.108	< 0.05 U	746	3,210
	5/17/2012	N	< 0.0100 UJ	--	0.229	--	--	0.188	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	321 J	2,100
	5/17/2012	FD	< 0.0100 UJ	--	0.232	--	--	0.219	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	329 J	2,160
	11/1/2012	N	--	< 0.0100 U	--	0.217	--	0.191	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	272	1,790
	11/1/2012	FD	--	< 0.0100 U	--	0.181	--	0.227	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	278	1,830
	5/17/2013	N	0.00930 J	--	0.275	--	--	0.274	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	301	1,730
	11/4/2013	N	< 0.0200 U	--	1.76	--	--	1.78	< 0.200 U	--	< 0.0200 U	--	4.05	4.59	1.84	1.82	--	--	650	3,230
	5/7/2014	N	< 0.0200 U	--	0.991	--	0.918	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	536	2,570
	11/7/2014	N	< 0.0200 U	--	0.224	--	0.192	--	< 0.200 U	--	0.00926 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	420	2460 J
	5/26/2015	N	0.00929 J	--	0.103	--	0.0732	--	< 0.200 U	--	0.00471 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	377	1,900
	11/6/2015	N	< 0.0200 U	--	0.453	--	0.444	--	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	585	2,490
	11/6/2015	FD	< 0.0200 UJ	--	0.45	--	0.543	--	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	605	2,530
	5/16/2016	N	0.0583	--	0.943	--	1.28	--	--	--	--	--	--	--	--	--	--	--	936	2,820
	9/20/2016	N	< 0.00336 U	--	1.17	--	1.11	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	762	3,220
	5/9/2017	N	0.00811	--	1.42	--	0.15	--	0.0226	--	0.00045 J	--	--	--	--	--	--	--	816	3,220
	9/21/2017	N	0.00734	--	1.25 J	--	--	1.25	< 0.100 U	--	0.00442	--	--	--	--	--	--	--	255	3,220
	4/2/2018	Reg	--	0.00798	--	--	1.75	--	1.88	< 0.100 U	--	--	0.000295 J	--	--	--	--	--	850	2,880
	9/13/2018	Reg	0.00757	--	1.76	--	1.84	--	--	< 0.100 U	0.000747 J	--	--	--	--	--	--	--	692	2,810
MW013A	10/28/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/29/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26	520
	1/20/1999	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	57	530
	5/22/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.021	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	100	600
	1/28/2002	N	--	--	< 0.05 U	--	0.028	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	130	760
	9/5/2002	N	--	--	< 0.05 U	--	0.037	--	--	--	--	--	--	--	--	--	--	--	90	--
	3/12/2003	N	--	--	--	--	0.009	--	--	--	--	--	--	--	--	--	--	--	82	--
	5/28/2003	N	--	--	--	--	0.019	--	--	--	--	--	--	--	--	--	--	--	70	--
	1/19/2004	N	--	--	0.75	--	0.5	--	--	--	--	--	--	--	--	--	--	--	690	--
	7/7/2004	N	--	--	0.6	--	0.54	--	--	--	--	--	--	--	--	--	--	--	700	--
	7/7/2004	FD	--	--	0.53	--	0.33	--	--	--	--	--	--	--	--	--	--	--	500	--
	1/11/2005	N	--	--	0.04	--	0.031	--	--	--	--	--	--	--	--	--	--	--	110	--
	1/11/2005	FD	--	--	0.05	--	0.043	--	--	--	--	--	--	--	--	--	--	--	110	--
	6/3/2005	N	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	80	--
	6/3/2005	FD	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	80	--
	1/26/2006	N	--	< 0.02 U	--	0.0492	--	0.039	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	111	647
	7/5/2006	N	--	< 0.02 U	--	0.0308	--	0.021	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	84	587
	4/16/2007	N	--	0.0204	--	0.0626	--	0.043	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	122	--
	9/21/2007	N	--	0.0259	--	0.0295	--	0.028	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	86	--
	4/7/2008	N	--	0.0223	--	0.0245	--	0.04 *	--	< 0.2 U	< 0.005 U	< 0.005 U	7.4	1.7	< 1 U	< 3 U	< 0.096 U	< 0.05 U	87.5	589
	8/21/2008	N	--	0.02	--	0.0269	--	0.023	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	85.3	588
	3/30/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.020 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.16	< 0.05 U	68	540
	8/4/2009	N	--	0.0243	--	< 0.015 U	--	< 0.020 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	72.5	540
	3/2/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.012	--	0.186	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.081	< 0.05 U	71.5	1,220
	8/4/2010	N	--	0.017	--	< 0.05 U	--	0.018	--	< 0.1 U	< 0.050 U	< 0.050 U	1.4	< 2 U	< 1 U	< 1 U	0.073	< 0.05 U	65	498
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	76.0 J	575
	10/29/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	68.6	554
	5/17/2013	N	0.0303	--	< 0.0100 U															

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW014	1/30/2002	FD	--	--	0.47	--	0.33	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	800	4,540
	9/17/2002	N	--	--	0.63	--	0.52	--	--	--	--	--	--	--	--	--	--	--	1,600	--
	1/2/2003	N	--	--	--	--	0.2	--	--	--	--	--	--	--	--	--	--	--	1,900	--
	3/18/2003	N	--	--	--	--	0.38	--	--	--	--	--	--	--	--	--	--	--	1,800	--
	6/3/2003	N	--	--	--	--	0.446	--	--	--	--	--	--	--	--	--	--	--	1,800	--
	1/6/2004	N	--	--	0.48	--	0.19	--	--	--	--	--	--	--	--	--	--	--	1,700	--
	6/30/2004	N	--	--	0.44	--	0.16	--	--	--	--	--	--	--	--	--	--	--	1,800	--
	1/10/2005	N	--	--	0.37	--	0.29	--	--	--	--	--	--	--	--	--	--	--	1,890	--
	6/8/2005	N	--	--	0.32	--	--	--	--	--	--	--	--	--	--	--	--	--	1,790	--
	1/26/2006	N	--	< 0.02 U	--	0.325	--	0.29	--	< 0.2 U	0.0337	0.0337	< 1 U	< 1 U	< 1 U	< 3 U	0.6	< 0.6 U	2,070	4,460
	6/29/2006	N	--	< 0.02 U	--	0.273	--	0.25	--	< 0.2 U	0.037	0.037	< 1 U	1.1	1.4	< 3 U	1.2	< 0.05 U	1,880	4,560
	4/13/2007	N	--	< 0.02 U	--	0.242	--	0.23	--	< 0.2 U	0.037	0.037	< 1 U	< 1 U	< 1 U	< 3 U	0.98	< 0.05 U	1,720	--
	9/19/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.289 U	0.0457	0.0457	--	--	--	--	--	--	--	--
	9/20/2007	N	--	--	--	0.235	--	0.18	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	1.1	< 0.05 U	1,630	--
	4/7/2008	N	--	0.0203	--	0.231	--	0.11 *	--	< 0.2 U	0.0488	0.0488	1.9	< 1 U	< 1 U	< 3 U	1.4	< 0.05 U	1,600	4,230
	3/30/2009	N	--	--	--	0.201	--	0.2	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	1.5	< 0.05 U	1,460	4,170
	4/1/2009	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	8/10/2009	N	--	0.0283	--	< 0.015 U	--	< 0.020 U	--	< 0.2 U	0.354	0.354	1.1	< 1 U	< 1 U	< 3 U	0.65	< 0.05 U	133	647
	3/9/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.10 U	--	0.135	0.629	0.629	< 1 U	< 1 U	< 1 U	< 1 U	2.14	< 0.05 U	1,350	3,750
	8/9/2010	N	--	0.034	--	< 0.05 U	--	0.027	--	< 0.1 U	0.385	0.385	< 1 U	< 2 U	< 1 U	< 1 U	2.57	< 0.05 U	1,230	3,650
	5/18/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.287	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,370	3,500
	10/29/2012	N	--	< 0.0100 U	--	0.0395	--	0.0275	--	< 0.200 U	0.186	0.186	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,670	4,410
	5/16/2013	N	0.0247	--	0.0245	--	--	0.0172	< 0.200 U	--	0.128	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,540	3,820
	11/5/2013	N	0.0209	--	0.0705	--	--	0.048	< 0.200 U	--	0.172	--	< 1.00 U	< 2.00 U	< 1.00 U	2.37	--	--	1,180	3,600
	5/7/2014	N	0.0231	--	0.0659	--	< 0.0500 U	--	0.0405 J	--	0.151	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,400	3,520
	11/5/2014	N	0.0183 J	--	0.00926 J	--	< 0.0100 U	--	< 0.200 U	--	0.12	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,890	3,900
	5/20/2015	N	0.0236	--	0.0281	--	0.0211	--	< 0.200 UJ	--	0.0891	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,910	4,580
	11/4/2015	N	0.0149 J	--	0.112	--	0.0884	--	0.0125 J	--	0.186	--	--	--	--	--	--	--	1,450	3,900
MW014A	11/4/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	97	510
	5/23/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.006	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	80	520
	1/24/2002	N	--	--	< 0.05 U	--	0.008	--	--	0.06	< 0.05 U	< 0.05 U	--	--	--	--	--	--	50	540
	9/5/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	40	--
	12/19/2002	N	--	--	--	--	0.005	--	--	--	--	--	--	--	--	--	--	--	44	--
	3/10/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	46	--
	5/21/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	44	--
	12/29/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--
	6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--
	12/16/2004	N	--	--	< 0.01 U	--	0.005	--	--	--	--	--	--	--	--	--	--	--	70	--
	6/2/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	50	--
	1/23/2006	N	--	0.0261	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	45.8	512
	6/29/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	1	1.4	< 3 U	< 0.095 U	< 0.05 U	47.9	506
	3/21/2007	N	--	0.0236	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	45.6	--
	9/13/2007	N	--	0.0207	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	46.2	--
	3/24/2008	N	--	0.0256	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	47.9	523
	3/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0065	0.0065	17	5.8	1.9	< 3 U	< 0.096 U	< 0.06 U	44.9	30
	8/20/2009	N	--	0.0214	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	45.6	507
	3/16/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.011	--	0.056	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	38.3	828
	8/9/2010	N	--	0.02	--	< 0.050 U	--	0.021	--	0.106	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.052	< 0.05 U	40.2	458
	5/18/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	56.2	518
	10/29/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	50.4	624
	5/16/2013	N	0.0198 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	46	440
	11/5/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	30.6	313
	5/7/2014	N	0.0254	--	< 0.0100 UJ	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	48.9	449
	11/5/2014	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	0.101 J	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	11.6	129
	5/21/2015	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	14.7	135
	11/4/2015	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	0.0169 J	--	--	--	--	--	--	--	12.3	140
	1/19/1999	N	< 0.10 U	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	1,400	3,000
	5/19/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/17/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	3,100	5,900
	5/17/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.033	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	3,200	6,890
	1/22/2002	N	--	--	--	< 0.05 U	--	0.005	< 1 U	0.2	< 0.5 U	< 0.05 U	--	--	--	--	--	--	3,200	6,900
	9/4/2002	N	--	--	< 0.05 U	--	0.008	--	--	--	--	--	--	--	--	--	--	--	2,700	--
	12/11/2002	N	--	--	--	--	0.014	--	--	--	--	--	--	--	--	--	--	--	3,100	--
	3/11/2003	N	--	--	--	--	0.012	--	--	--	--	--	--	--	--	--	--	--	2,900	--
	5/29/2003	N	--	--	--	--	0.016	--	--	--	--	--	--	--	--	--	--	--	2,800	--
	12/30/2003	N	--	--	0.01	--	0.023	--	--	--	--	--	--	--	--	--	--	--	310	--
	6/24/2004	N	--	--	0.01	--	0.005	--	--	--	--	--	--	--	--	--	--	--	2,100	--
	1/4/2005	N	--	--	0.01	--	0.01	--	--	--	--	--	--	--	--	--	--	--	2,800	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW015	6/3/2005	N	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	2,490	--	
	1/25/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	2,720	6,450	
	6/29/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.2	< 3 U	0.11	< 0.05 U	2,900	7,100	
	3/22/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.13	< 0.05 U	2,570	--	
	9/19/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	2,380	--	
	3/24/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	2,230	5,310	
	8/6/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	2,380	4,730	
	3/19/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	2.9	1.2	< 1 U	< 3 U	< 0.097 U	< 0.05 U	1,850	4,840	
	8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	1,590	3,930	
	3/10/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.084	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.071	< 0.05 U	1,100	3,550	
	8/11/2010	N	--	< 0.01 U	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.076	< 0.05 U	824	3,480	
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	777 J	2,620	
	10/29/2012	N	--	< 0.0100 U	--	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	576	2,070
	5/16/2013	N	0.0173 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	532	2,050	
	11/5/2013	N	0.0120 J	--	0.00624 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	543	2,250	
	5/6/2014	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	639	2,480	
	11/4/2014	N	0.00581 J	--	0.00458 J	--	< 0.0100 U	--	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	438	2,020	
	5/27/2015	N	< 0.0200 U	--	0.000828 J	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	516	1,910	
	11/4/2015	N	0.00450 J	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	476	1,920	
	5/13/2016	N	0.0365	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	533	1,800	
	9/20/2016	N	0.00419 J	--	0.00475 J	--	< 0.01 U	--	< 0.00616 U	--	0.00201 J	--	--	--	--	--	--	--	500	1,810	
	5/11/2017	N	0.00558	--	0.00267 J	--	< 0.01 U	--	0.00384 J	--	0.000542 J	--	--	--	--	--	--	--	476	1,700	
	MW015A	11/4/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	230	650
		1/19/1999	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	140	630
		5/17/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.006	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	270	780
1/22/2002		N	--	--	--	< 0.05 U	--	< 0.005 U	--	< 1 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	390	1,020	
9/4/2002		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	350	--	
12/11/2002		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	320	--	
3/3/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	370	--	
5/21/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	530	--	
12/29/2003		N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	970	--	
6/17/2004		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,130	--	
12/20/2004		N	--	--	< 0.01 U	--	0.006	--	--	--	--	--	--	--	--	--	--	--	960	--	
6/2/2005		N	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	1,030	--	
1/23/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,130	2,410	
6/29/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	1.8	1.9	< 3 U	< 0.095 U	< 0.05 U	1,440	3,140	
3/22/2007		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1,320	--	
9/14/2007		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1,400	--	
3/24/2008		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.4	< 3 U	< 0.096 U	< 0.05 U	1,910	3,620	
8/6/2008		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	2,020	3,140	
3/19/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	9.8	2.7	1.1	< 3 U	< 0.096 U	< 0.05 U	2,010	4,190	
8/21/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	2,270	--	
3/10/2010		N	--	< 0.05 U	--	< 0.05 U	--	0.012	--	0.171	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.065	< 0.05 U	1,930	5,080	
8/11/2010		N	--	< 0.01 U	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	1,610	5,540	
5/17/2012		N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	2730 J	6,170	
10/29/2012		N	--	< 0.0100 U	--	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U</						

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW016A	12/29/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	260	--
	6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	270	--
	12/16/2004	N	--	--	< 0.01 U	--	0.012	--	--	--	--	--	--	--	--	--	--	--	320	--
	6/2/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	260	--
	1/20/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	255	916
	6/29/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.3	< 3 U	< 0.096 U	< 0.05 U	267	934
	3/22/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	260	--
	9/13/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	269	--
	3/19/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	5.3	14	5.1	< 0.097 U	0.07	289	976
	8/7/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	352	1,030
	3/17/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	7.6	3	1.2	< 3 U	< 0.094 U	< 0.05 U	368	1,090
	8/21/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	509	--
	3/10/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.074	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.050 U	< 0.050 U	306	1,030
	8/11/2010	N	--	0.02	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.196	< 0.050 U	305	1,200
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	256 J	889
	10/26/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	542	1,190
	5/16/2013	N	0.0153 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.00528 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	250	909
	11/5/2013	N	0.00924 J	--	0.00397 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	3.06	< 2.00 U	< 1.00 U	3.02	--	--	541	1,790
	5/6/2014	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	590	1,820
	11/13/2014	N	< 0.0200 U	--	0.000983 J	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	262	1,010
	5/27/2015	N	< 0.0200 U	--	< 0.0100 U	--	0.00680 J	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	272	966
11/12/2015	N	0.00876 J	--	0.0407	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	303	1,020	
9/14/2018	Reg	0.00914	--	0.00528	--	< 0.0100 U	--	--	< 0.100 U	< 0.00200 U	--	--	--	--	--	--	--	513	1,290	
MW017A	11/10/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	120	570
	5/17/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.007	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	80	540
	1/23/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	67	520
	9/4/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--
	12/12/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	49	--
	3/4/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	54	--
	5/21/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	56	--
	12/30/2003	N	--	--	< 0.01 U	--	0.01	--	--	--	--	--	--	--	--	--	--	--	60	--
	6/23/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	80	--
	1/4/2005	N	--	--	< 0.01 U	--	0.01	--	--	--	--	--	--	--	--	--	--	--	80	--
	6/3/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	70	--
	1/24/2006	N	--	0.0226	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	69.7	545
	6/29/2006	N	--	0.0206	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	1.2	1.4	< 3 U	< 0.095 U	< 0.05 U	87.8	567
	3/21/2007	N	--	0.0226	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.005 U	83.7	--
	5/19/1999	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	420	1,300
	11/17/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	370	1,300
	5/17/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	330	1,280
1/23/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	360	1,410	
9/4/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	220	--	
12/12/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	220	--	
3/4/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	180	--	
5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	230	--	
12/30/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	180	--	
6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	240	--	
12/20/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	250	--	
5/31/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	250	--	
1/23/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	284	1,300	
1/23/2006	FD	--	0.021	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U</											

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/13/2016	N	0.0241	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	174	835
	9/20/2016	N	0.0068 J	--	0.00271 J	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	198	1,180
	5/10/2017	N	0.00994	--	< 0.004 UB	--	< 0.01 U	--	0.00457 J	--	< 0.002 U	--	--	--	--	--	--	--	210	1,120
	9/21/2017	N	0.0128	--	< 0.00400 U	--	--	< 0.0100 U	< 0.100 U	--	< 0.00200 U	--	--	--	--	--	--	--	241	1,290
	4/2/2018	Reg	--	0.00969	--	< 0.00400 U	--	< 0.0100 U	< 0.100 U	--	--	0.00133 J	--	--	--	--	--	--	660	1,900
	4/2/2018	FD	--	0.00933	--	0.000717 J	--	< 0.0100 U	< 0.100 U	--	--	0.00151 J	--	--	--	--	--	--	601	2,020
	9/13/2018	Reg	0.00937 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.00220 J	--	--	--	--	--	--	--	528	2,210
MW018A	11/7/1997	N	< 0.10 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	360	1,500
	1/19/1999	N	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	390	1,400
	5/17/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	330	1,300
	1/23/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	280	1,260
	9/4/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	240	--
	12/16/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	260	--
	3/4/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	250	--
	5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	250	--
	12/30/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	210	--
	6/16/2004	N	--	--	< 0.05 U	--	0.006	--	--	--	--	--	--	--	--	--	--	--	170	--
	12/16/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	220	--
	5/31/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	200	--
	1/20/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	233	1,040
	6/29/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	2.3	2.7	< 3 U	< 0.095 U	< 0.05 U	236	1,350
	4/2/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	283	--
	9/13/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	212	--
	3/24/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	233	1,080
	3/17/2009	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	1,050
	3/18/2009	N	--	--	--	< 0.015 U	--	< 0.02 U	--	--	--	--	7.9	2.9	1.3	< 3 U	< 0.094 U	< 0.05 U	219	--
	8/21/2009	N	--	0.0209	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	304	--
	3/10/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.071	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.050 U	< 0.050 U	154	968
	8/10/2010	N	--	0.015	--	< 0.050 U	--	0.012	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.062	< 0.050 U	140	858
	5/21/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	219	1,180
	10/26/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	222	997
	5/13/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0218	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	22.9	219
MW019A	11/10/1997	N	< 0.01 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	480	1,500
	1/19/1999	N	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	520	1,500
	1/19/1999	FD	< 0.01 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	500	1,500
	5/17/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	490	1,450
	1/23/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	420	1,340
	9/5/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	330	--
	12/2/2002	N	--	--	< 0.05 U	--	0.013	--	--	--	--	--	--	--	--	--	--	--	360	--
	3/11/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	350	--
	5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	380	--
	12/30/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	290	--
	6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	290	--
	6/17/2004	FD	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	320	--
	12/20/2004	N	--	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	350	--
	12/20/2004	FD	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	340	--
	5/31/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	340	--
	1/23/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	385	1,350
	6/30/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	2.3	2.2	< 3 U	< 0.094 U	< 0.05 U	360	1,190
	4/4/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.212	0.0083	0.0083	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	343	--
	9/14/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.486	0.0186	0.0186	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	306	--
	3/26/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U</										

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	9/21/2017	N	0.0134	--	0.000637 J	--	--	< 0.0100 U	< 0.100 U	--	0.000387 J	--	--	--	--	--	--	--	262	1,250	
	4/2/2018	Reg	--	0.0125	--	0.000668 J	--	< 0.0100 U	< 0.100 U	--	--	0.00157 J	--	--	--	--	--	--	301	1,060	
	9/13/2018	Reg	0.0116 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.0118	--	--	--	--	--	--	--	291	1,170	
MW020	1/19/1999	N	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	570	1,680	
	11/17/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	570	1,600	
	6/7/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	700	1,770	
	2/6/2002	N	--	--	< 0.05 U	--	--	0.026	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	450	1,720	
	9/9/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	600	--	
	12/9/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	610	--	
	3/6/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	610	--	
	6/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	710	--	
	1/22/2004	N	--	--	< 0.01 U	--	0.016	--	--	--	--	--	--	--	--	--	--	--	800	--	
	6/23/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	760	--	
	1/3/2005	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	850	--	
	5/26/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	890	--	
	1/25/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	992	2,460	
	1/25/2006	FD	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,010	2,410	
	6/30/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	1.2	1.5	< 3 U	0.14	< 0.05 U	908	2,370	
	4/4/2007	N	--	0.202	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	824	--	
	9/18/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	826	--	
	3/26/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.862	0.0104	0.0104	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	887	1,820	
	8/6/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	785	1,940	
	3/19/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	4.9	2	< 1 U	< 3 U	0.15	< 0.05 U	817	2,190	
	8/21/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.2	< 0.05 U	1,180	--	
	3/12/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.012	--	0.095	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.134	< 0.05 U	727	2,540	
	8/10/2010	N	--	0.019	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.199	< 0.05 U	826	2,640	
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	894 J	2,580
	10/26/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	917	2,050
	5/13/2013	N	0.0192 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	865	2,420
	5/6/2014	N	< 0.0200 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	741	2,530
	11/4/2014	N	< 0.0200 U	--	0.00291 J	--	< 0.0100 U	--	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	670	2,470
	5/7/2015	N	0.0155 J	--	0.00137 J	--	< 0.0100 U	--	< 0.200 U	--	0.00400 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	738	2,150
	11/3/2015	N	0.0107 J	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	--	745	2,300
	5/16/2016	N	0.0298	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	--	915	2,600
	9/20/2016	N	< 0.00336 U	--	0.00617 J	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	--	730	2,080
	5/11/2017	N	0.0105	--	0.00371 J	--	< 0.01 U	--	0.0236	--	0.00101 J	--	--	--	--	--	--	--	--	733	2,180
MW020A	1/19/1999	N	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	250	1000	
	6/7/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.012	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	390	1,330	
	2/6/2002	N	--	--	< 0.05 U	--	--	0.014	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	350	1,320	
	9/9/2002	N	--	--	< 0.05 U	--	0.015	--	--	--	--	--	--	--	--	--	--	--	340	--	
	12/9/2002	N	--	--	< 0.05 U	--	0.022	--	--	--	--	--	--	--	--	--	--	--	370	--	
	3/6/2003	N	--	--	--	--	0.012	--	--	--	--	--	--	--	--	--	--	--	370	--	
	6/5/2003	N	--	--	--	--	0.008	--	--	--	--	--	--	--	--	--	--	--	430	--	
	1/22/2004	N	--	--	0.02	--	0.005	--	--	--	--	--	--	--	--	--	--	--	230	--	
	6/22/2004	N	--	--	0.01	--	0.01	--	--	--	--	--	--	--	--	--	--	--	200	--	
	1/3/2005	N	--	--	0.02	--	0.019	--	--	--	--	--	--	--	--	--	--	--	480	--	
	5/31/2005	N	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	430	--	
	1/24/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	521	1,510	
	6/30/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	579	1,550	
	4/4/2007	N	--	< 0.02 U	--	0.0185	--	< 0.02 U	--	0.421											

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	9/21/2017	N	0.0108	--	0.00696 J	--	--	< 0.0100 U	< 0.100 U	--	< 0.00200 U	--	--	--	--	--	--	--	1,010	2,700
	4/2/2018	Reg	--	0.0101	--	0.00589	--	< 0.0100 U	< 0.100 U	--	--	0.00115 J	--	--	--	--	--	--	1,130	2,180
	9/13/2018	Reg	0.0112 J	--	0.00675 J	--	< 0.0100 U	--	--	< 0.500 U	0.00217 J	--	--	--	--	--	--	--	961	2,370
MW021	1/18/1999	N	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	740	2,700
	11/17/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	780	3,100
	5/18/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	660	2,630
	1/23/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	< 0.1 U	0.11	0.1	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	250	2,420
	9/5/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	370	--
	12/11/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.5 U	< 0.05 U	410	--
	3/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	390	--
	5/21/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.24 U	< 0.05 U	480	--
	1/21/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	180	--
	6/22/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	160	--
	12/21/2004	N	--	--	< 0.01 U	--	< 0.01 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.63	< 0.05 U	320	--
	5/27/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	< 2 U	< 2 U	3	< 6 U	0.4	< 0.05 U	290	--
	1/24/2006	N	--	0.0202	--	< 0.015 U	--	< 0.02 U	--	0.374	0.215	0.215	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	272	1,680
	6/30/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.15	0.15	< 1 U	< 1 U	< 1 U	< 3 U	0.78	< 0.05 U	346	1,800
	4/9/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.173	0.173	< 1 U	< 1 U	< 1 U	< 3 U	0.46	< 0.05 U	215	--
	9/19/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.173	0.173	< 1 U	< 1 U	< 1 U	< 3 U	0.38	< 0.05 U	242	--
	4/1/2008	N	--	0.0276	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.231	0.231	17	3.9	1.5	< 3 U	0.57	0.054	234	1,540
	8/7/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.198	0.198	< 1 U	< 1 U	< 1 U	< 3 U	0.51	< 0.05 U	197	1,530
	3/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.396	0.396	< 1 U	< 1 U	< 1 U	< 3 U	0.52	< 0.05 U	216	1,460
	8/6/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.172	0.172	< 1 U	< 1 U	< 1 U	< 3 U	0.67	< 0.05 U	193	1,490
	3/2/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.102	0.291	0.291	< 1 U	< 2 U	< 1 U	< 1 U	0.206	< 0.05 U	148	1,900
	8/16/2010	N	--	0.026	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	0.099	0.099	< 1 U	< 2 U	< 1 U	< 1 U	0.5	< 0.05 U	113	1,700
	5/23/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	1.13	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	65.3	841
	11/1/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	1.52	1.52	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	80.3	900
MW021A	1/18/1999	N	< 0.10 U	--	0.05	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	7,000	9,200
	1/20/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/23/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.022	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	7,000	13,400
	1/24/2002	N	--	--	< 0.05 U	--	0.006	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	5,800	9,900
	9/5/2002	N	--	--	< 0.05 U	--	0.012	--	--	--	--	--	--	--	--	--	--	--	4,900	--
	12/11/2002	N	--	--	< 0.05 U	--	0.009	--	--	--	--	--	--	--	--	--	--	--	5,800	--
	3/11/2003	N	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	5,300	--
	5/21/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	5,900	--
	1/21/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	3,800	--
	6/22/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	3,400	--
	12/21/2004	N	--	--	0.04	--	0.022	--	--	--	--	--	--	--	--	--	--	--	400	--
	6/6/2005	N	--	--	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	7,600	--
	1/24/2006	N	--	< 0.02 U	--	0.0307	--	0.026	--	< 0.2 U	0.0103	0.0103	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	6,110	12,300
	6/30/2006	N	--	< 0.02 U	--	0.0326	--	0.033	--	< 0.2 U	0.0077	0.0077	< 1 U	< 1 U	< 1 U	< 3 U	0.4	< 0.05 U	7,720	14,000
	4/9/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.020 U	--	< 0.2 U	0.0112	0.0112	< 1 U	< 1 U	< 1 U	< 3 U	1.2	< 0.05 U	3,350	--
	9/19/2007	N	--	< 0.02 U	--	0.0261	--	0.027	--	< 0.2 U	0.0139	0.0139	< 1 U	< 1 U	< 1 U	< 3 U	0.56	< 0.05 U	6,180	--
	4/1/2008	N	--	< 0.02 U	--	0.0365	--	0.023	--	< 0.2 U	0.0158	0.0158	31	5.7	1.7	< 3 U	0.7	0.091	6,440	11,900
	3/24/2009	N	--	< 0.02 U	--	0.0264	--	< 0.020 U	--	< 0.2 U	0.0152	0.0152	< 1 U	< 1 U	< 1 U	< 3 U	0.56	< 0.05 U	6,370	11,300
	8/6/2009	N	--	< 0.02 U	--	0.0318	--	0.031	--	< 0.2 U	0.0114	0.0114	< 1 U	< 1 U	< 1 U	< 3 U	0.81	0.054	6,020	13,300
	3/2/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.03	--	0.197	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.488	< 0.05 U	7,720	19,100
	8/16/2010	N	--	0.034	--	< 0.05 U	--	0.023	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.67	< 0.05 U	5,030	10,900
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	&gt												

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW022A	3/12/2003	N	--	--	--	--	0.036	--	--	--	--	--	--	--	--	--	--	--	560	--
	5/29/2003	N	--	--	--	--	0.027	--	--	--	--	--	--	--	--	--	--	--	510	--
	1/22/2004	N	--	--	0.04	--	0.013	--	--	--	--	--	--	--	--	--	--	--	490	--
	6/23/2004	N	--	--	0.03	--	0.033	--	--	--	--	--	--	--	--	--	--	--	440	--
	1/6/2005	N	--	--	0.04	--	0.02	--	--	--	--	--	--	--	--	--	--	--	460	--
	6/3/2005	N	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	510	--
	1/24/2006	N	--	< 0.02 U	--	0.0217	--	< 0.02 U	--	< 0.2 U	0.0058	0.0058	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	70.5	439
	7/6/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	65.2	212
	3/30/2007	N	--	< 0.02 U	--	0.0181	--	< 0.02 U	--	0.28	0.0112	0.0112	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	69	--
	9/14/2007	N	--	< 0.02 U	--	0.0211	--	< 0.02 U	--	0.508	0.0219	0.0219	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	61.3	--
	4/2/2008	N	--	< 0.02 U	--	0.0305	--	< 0.02 U	--	0.607	0.0216	0.0216	24	4.9	1.5	< 3 U	< 0.095 U	0.068	67.9	449
	8/13/2008	N	--	< 0.02 U	--	0.0306	--	0.026	--	< 0.2 U	0.0143	0.0143	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	75.3	437
	3/18/2009	N	--	< 0.02 U	--	0.0275	--	0.022	--	< 0.2 U	0.0059	0.0059	3.6	1.6	< 1 U	< 3 U	< 0.097 U	< 0.05 U	61	445
	8/25/2009	N	--	--	--	0.0315	--	0.026	--	--	--	--	< 1 U	< 1 U	2.6	< 3 U	< 0.096 U	< 0.05 U	68.7	--
	3/11/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.048	--	0.071	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	44	336
	8/18/2010	N	--	0.013	--	< 0.05 U	--	0.06	--	< 0.1 U	< 0.05 U	< 0.05 U	1.4	2.7	< 1 U	< 1 U	0.255	< 0.05 U	41.2	478
	5/23/2012	N	< 0.0100 UJ	--	0.0408	--	--	0.0356	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	62.9	428
	11/9/2012	N	--	< 0.0100 U	--	0.073	--	0.058	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	62.9	376
	5/21/2013	N	< 0.0200 U	--	0.0389	--	--	0.0348	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	59.6	412
MW023	5/23/1999	N	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/1999	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	910	3,500
	11/18/1999	N	--	--	2.56	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	4,100
	1/7/2000	N	--	--	2.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/29/2001	N	--	< 0.05 U	--	2.76	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,100	4,390
	5/29/2001	FD	--	< 0.05 U	--	2.55	--	0.015	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,100	4,420
	8/30/2001	N	--	--	2.5	2.29	1.5	2.5	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	--	--
	9/27/2001	N	--	--	2.39	2.3	1.8	2	--	--	--	--	--	--	--	--	--	--	--	--
	2/7/2002	N	--	--	2.52	--	1.9	--	--	--	--	--	--	--	--	--	--	--	1,300	4,300
	9/17/2002	FD	--	--	2.96	--	1.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	690	--
	9/18/2002	N	--	--	0.43	--	0.21	--	--	--	--	--	--	--	--	--	--	--	1,150	--
	9/18/2002	N	--	--	2.41	--	1.3	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	12/16/2002	N	--	--	--	--	1.9	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	12/16/2002	FD	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	3/26/2003	N	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	3/26/2003	FD	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	5/28/2003	N	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	5/28/2003	FD	--	--	--	--	1.99	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	1/21/2004	N	--	--	1.57	--	0.8	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,240	--
	1/21/2004	FD	--	--	1.53	--	0.6	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.26 U	< 0.05 U	1,240	--
	7/7/2004	N	--	--	0.99	--	0.58	--	--	--	--	--	--	--	--	--	--	--	1,200	--
	1/12/2005	N	--	--	1.21	--	0.7	--	--	--	--	--	--	--	--	--	--	--	1,290	--
	6/1/2005	N	--	--	0.72	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,210	--
	1/26/2006	N	--	< 0.02 U	--	0.459	--	0.43	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,290	4,070
	6/26/2006	N	--	< 0.02 U	--	0.549	--	0.55	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	1,180	3,780
	4/18/2007	N	--	< 0.02 U	--	1.33	--	1.2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	965	--
	9/21/2007	N	--	0.0212	--	1.65	--	1.6	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	975	--
	4/9/2008	N	--	< 0.02 U	--	1.66	--	1.7	--	< 0.2 U	< 0.005 U	< 0.005 U	4.8	1.2	< 1 U	< 3 U	< 0.097 U	< 0.05 U	862	3,660
	8/21/2008	N	--	< 0.02 U	--	1.62	--	1.7	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	879	3,920
	3/31/2009	N	--	< 0.02 U	--	1.69	--	1.7	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	949	3,940
	8/12/2009	N	--	0.0218	--	1.69	--	1.6	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	771	3,890
	3/9/2010	N	--	< 0.05 U	--	1.62	--	1.87	--	0.067	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.117	< 0.05 U	787	3,660
	8/6/2010	N	--	< 0.01 U	--	1.44	--	< 0.10 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.052 U	< 0.05 U	760	3,640
	5/24/2012	N	< 0.0100 U	--	1.86	--	--	1.96	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	810	3,720
	11/6/2012	N	--	< 0.0100 U	--	1.41	--	1.33	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	802	3,650
	5/21/2013	N	< 0.0200 U	--	1.11	--	--	0.958	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	767	3,500
	10/31/2013	N	0.0198 J	--	1.37	--	--	1.42 J	< 0.200 U	--	0.0266	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	762	3,680
	5/8/2014	N	0.0165 J	--	1.6	--	--	1.55	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	812	3,440
	11/7/2014	N	0.0223	--	1.14	--	--	0.968	< 0.200 U	--	0.0291	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	776	3850 J
	5/27/2015	N	0.0153 J	--	0.00318 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	43	493
	11/9/2015	N	< 0.0200 U	--	1.01	--	--	0.955	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	766	3,470
	5/20/2016	N	0.00922 J	--	1.18	--	1.28	--	--	--	--	--	--	--	--	--	--	--	672	4,120
	5/20/2016	FD	0.00928 J	--	1.27	--	1.58	--	--	--	--	--	--	--	--	--	--	--	665	4,090
	9/21/2016	N	< 0.00336 U	--	1.03	--	1.36	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	790	3,680
	5/11/2017	N	0.00749	--	1.09	--	1.05	--	0.00308 J	--	0.00372 J	--	--	--	--	--	--	--	798	3,180
	9/21/2017	N	0.01	--	1.32 J	--	--	1.09	< 0.100 U	--	< 0.00200 U	--	--	--	--	--	--	--	739	3,540
	3/29/2018	Reg	--	0.00928	--	1.42	--	1.31	< 0.1	--	--	0.000486 J	--	--	--	--	--	--	747	2,800
	9/13/2018	Reg	0.00933	--	1.72	--	1.43	--	--	< 0.100 U	< 0.00200 U	--	--	--	--	--	--	--	785	3,160

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW023A	1/9/2003	N	--	< 0.05 U	< 0.05 U	--	0.006	--	--	--	--	--	< 2 U	9	< 2 U	< 2 U	< 0.25 U	< 0.05 U	52	500
	3/11/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	52	--
	5/28/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	27	--
	1/15/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	60	--
	6/16/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--
	12/14/2004	N	--	--	< 0.01 U	--	0.005	--	--	--	--	--	--	--	--	--	--	--	60	--
	6/2/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	60	--
	1/20/2006	N	--	0.0246	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	50.1	516
	1/20/2006	FD	--	0.0251	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	50.5	520
	6/26/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	48.5	506
	3/29/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	48.4	--
	9/11/2007	N	--	0.0287	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	9/12/2007	N	--	--	--	< 0.015 U	--	< 0.02 U	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	46.2	--
	3/25/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	52.2	524
	8/12/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0073	0.0073	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	52.3	502
	3/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	31	7.3	2	< 3 U	0.099	0.094	46.6	520
	8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	50.6	526
	3/17/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	< 0.03 U	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.09	< 0.05 U	45.4	552
	8/16/2010	N	--	0.028	--	< 0.050 U	--	0.018	--	< 0.10 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	37.5	546
	5/24/2012	N	< 0.0100 U	--	0.0206	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	46.7	595
	10/30/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	46.9	525
	5/20/2013	N	0.0189 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	45.1	473
	5/20/2013	FD	0.0188 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	46.5	494
	10/31/2013	N	0.0169 J	--	0.00591 J	--	--	< 0.0100 U	< 0.200 U	--	0.00877 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	45.7	1,980
	5/8/2014	N	0.0175 J	--	0.00352 J	--	--	< 0.0100 U	< 0.200 U	--	0.00892 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	54.2	486 J
	11/7/2014	N	0.00758 J	--	0.00472 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	50.4	688 J
	5/27/2015	N	0.0106 J	--	1.98	--	--	2.02	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	823	3,920
	5/27/2015	FD	0.00728 J	--	1.83	--	--	2.13	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	789	4,060
	11/9/2015	N	0.0265	--	0.00631 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	48.8	553
	5/20/2016	N	0.022	--	0.00527 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	30.8	542
	9/21/2016	N	0.0112	--	0.00143 J	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	50.8	505
	5/11/2017	N	0.0189	--	0.00535	--	< 0.01 U	--	0.00417 J	--	0.000257 J	--	--	--	--	--	--	--	49.9	594
MW024	1/9/2003	N	--	< 0.05 U	< 0.05 U	--	0.015	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	360	1,290
	3/12/2003	N	--	--	--	--	0.033	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	350	--
	5/28/2003	N	--	--	--	--	0.017	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.24 U	< 0.05 U	340	--
	1/15/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.24 U	< 0.05 U	500	--
	6/22/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	620	--
	12/28/2004	N	--	--	0.03	--	0.016	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	450	--
	6/2/2005	N	--	--	0.12	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	330	--
	6/2/2005	FD	--	--	0.03	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	340	--
	7/18/2005	N	--	--	0.07	--	--	--	< 0.4 U	--	< 0.01 U	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.5 U	15	380	--
	1/24/2006	N	--	< 0.02 U	--	0.184	--	0.18	--	< 0.2 U	0.0266	0.0266	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	636	1,550
	6/27/2006	N	--	< 0.02 U	--	0.125	--	0.1	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.8	4.7	3.9	< 0.096 U	< 0.05 U	613	1,610
	4/11/2007	N	--	< 0.02 U	--	0.0289	--	0.027	--	< 0.2 U	0.0682	0.0682	< 1 U	< 1 U	< 1 U	< 3 U	0.14	< 0.05 U	577	--
	9/14/2007	N	--	--	--	0.0443	--	0.043	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	0.27	< 0.05 U	560	--
	9/19/2007	N	--	< 0.02 U	--	--	--	--	< 0.2 U	0.0144	0.0144	--	--	--	--	--	--	--	--	--
	4/7/2008	N	--	< 0.02 U	--	0.0399	--	0.046 *	--	< 0.2 U	0.0267	0.0267	1.9	< 1 U	< 1 U	< 3 U	0.4	< 0.05 U		

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW024A	10/10/2002	N	--	--	0.18	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/17/2002	N	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	--	640	--
	3/17/2003	N	--	--	--	--	0.26	--	--	--	--	--	--	--	--	--	--	--	790	--
	5/28/2003	N	--	--	--	--	0.268	--	--	--	--	--	--	--	--	--	--	--	910	--
	1/15/2004	N	--	--	0.06	--	0.043	--	--	--	--	--	--	--	--	--	--	--	310	--
	6/24/2004	N	--	--	0.25	--	0.102	--	--	--	--	--	--	--	--	--	--	--	750	--
	1/6/2005	N	--	--	0.3	--	0.022	--	--	--	--	--	--	--	--	--	--	--	740	--
	7/18/2005	N	--	--	0.11	--	--	--	< 0.4 U	--	< 0.01 U	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.52 U	18	310	--
	1/25/2006	N	--	< 0.02 U	--	0.043	--	0.04	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	181	747
	6/27/2006	N	--	< 0.02 U	--	0.0446	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.5	4.3	3.5	< 0.096 U	< 0.05 U	203	781
	6/27/2006	FD	--	0.0202	--	0.0466	--	0.04	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.4	4	3.4	< 0.096 U	< 0.05 U	191	770
	4/11/2007	N	--	0.0206	--	0.0242	--	0.021	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	170	--
	9/14/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	9/19/2007	N	--	--	--	0.0254	--	0.023	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	180	--
	4/7/2008	N	--	< 0.02 U	--	0.0279	--	0.044 *	--	< 0.2 U	< 0.005 U	< 0.005 U	4.6	1.2	< 1 U	< 3 U	< 0.095 U	< 0.05 U	195	757
	8/13/2008	N	--	0.0251	--	0.134	--	0.091	--	< 0.2 U	0.0139	0.0139	4.3	4.7	10	< 3 U	< 0.1 U	< 0.05 U	474	1,160
	3/25/2009	N	--	< 0.02 U	--	0.162	--	0.15	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	530	1,350
	8/12/2009	N	--	< 0.02 U	--	0.0307	--	0.034	--	< 0.2 U	< 0.005 U	< 0.005 U	2	1.3	< 1 U	< 3 U	0.24	< 0.05 U	63.5	452
	3/5/2010	N	--	< 0.05 U	--	0.125	--	0.13	--	0.324	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.053	< 0.05 U	422	1,300
	8/6/2010	N	--	0.011	--	0.118	--	0.162	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.076	< 0.05 U	433	1,430
	5/18/2012	N	< 0.0100 U	--	0.183	--	--	0.186	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	669	2,190
	10/30/2012	N	--	< 0.0100 U	--	0.192	--	0.196	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	661	1,520
	5/13/2013	N	0.0144 J	--	0.147	--	--	0.127	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	483	1,270
	10/30/2013	N	0.0275	--	0.0616	--	--	0.0598	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	278	956
	5/8/2014	N	0.0135 J	--	0.362	--	--	0.337	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	804	2,480
	5/8/2014	FD	0.0137 J	--	0.354	--	--	0.338	< 0.200 U	--	0.00381 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	777	2,510
	11/7/2014	N	< 0.0200 U	--	0.0816	--	--	0.0665	< 0.200 U	--	0.00379 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	279	1120 J
	5/28/2015	N	0.00760 J	--	0.0739	--	--	0.0723	< 0.200 U	--	0.00378 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	309	1,080
	11/6/2015	N	< 0.0200 UJ	--	0.0943	--	--	0.0797	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	339	1,150
	5/16/2016	N	0.0417	--	0.55	--	0.678	--	--	--	--	--	--	--	--	--	--	--	946	2,100
	9/21/2016	N	0.00548 J	--	0.732	--	0.81	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	864	3,200
	5/11/2017	N	0.0109	--	0.724	--	0.785	--	0.00442 J	--	0.000468 J	--	--	--	--	--	--	--	918	2,370
	9/21/2017	N	0.0128	--	0.437 J	--	--	0.457 J	< 0.100 U	--	0.000585 J	--	--	--	--	--	--	--	790	2,620
	9/21/2017	FD	0.012	--	0.689 J	--	--	0.852 J	< 0.100 U	--	< 0.00200 U	--	--	--	--	--	--	--	748	3,010
	3/29/2018	Reg	--	0.012	--	0.621	--	0.479	< 0.1	--	--	0.000484 J	--	--	--	--	--	--	884	2,360
	9/12/2018	Reg	0.0125	--	0.579	--	0.477	--	--	< 0.100 U	< 0.00200 U	--	--	--	--	--	--	--	901	2,420
	9/12/2018	FD	0.0126	--	0.547	--	0.52	--	--	< 0.100 U	0.000247 J	--	--	--	--	--	--	--	894	2,310
MW025	5/19/1999	N	< 0.10 U	--	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	800	2,600
	11/18/1999	N	--	--	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--	760	2,800
	11/18/1999	FD	--	--	4.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/29/2001	N	--	< 0.05 U	--	4.18	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,000	3,440
	8/27/2001	N	--	--	< 0.05 U < 0.05 U	< 0.05 U < 0.05 U	0.038 0.043	0.037 0.03	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	--	--
	9/27/2001	N	--	--	0.33	--	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2002	N	--	--	0.53	--	0.42	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	810	2,540
	9/17/2002	N	--	--	0.4	--	0.26	--	--	--	--	--	--	--	--	--	--	--	710	--
	1/2/2003	N	--	--	--	--	0.006	--	--	--	--	--	--	--	--	--	--	--	140	--
	3/11/2003	N	--	--	--	--	0.024	--	--	--	--	--	--	--	--	--	--	--	430	--
	5/29/2003	N	--	--	--	--	0.011	--	--	--	--	--	--	--	--	--	--	--	460	--
	6/3/2003	N	--	--	--	--	0.216	--	--	--	--	--	--	--	--	--	--	--	690	--
	1/7/2004	N	--	--	0.01	--	0.008	--	--	--	--	--	--	--	--	--	--	--	230	--
	6/22/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	60	--
	1/3/2005	N	--	--	0.02	--	0.022	--	--	--	--	--	--	--	--	--	--	--	380	--
	6/2/2005	N	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	380	--
	1/24/2006	N	--	< 0.02 U	--	0.0403	--	0.036	--	< 0.2 U	0.009	0.009	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	281	1,470
	7/5/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0104	0.0104	< 1 U	1.3	1.2	< 3 U	1.3	< 0.05 U	397	1,660
	3/22/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	7	7	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	375	--
	9/19/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.011	0.011	< 1 U	< 1 U	< 1 U	< 3 U	0.43	< 0.05 U	320	--
	3/24/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0112	0.0112	< 1 U	< 1 U	< 1 U	< 3 U	0.57	< 0.05 U	393	1,610
	8/7/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0105	0.0105	< 1 U	< 1 U	< 1 U	< 3 U	0.29	< 0.05 U	392	1,550
	3/19/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0129	0.0129	3.5	1.4	< 1 U	< 3 U	0.33	< 0.05 U	418	120
	8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0125	0.0125	< 1 U	< 1 U	< 1 U	< 3 U	0.41	< 0.05 U	432	1,690
	3/9/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.22	--	0.033	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.598	< 0.05 U	359	1,600
	8/11/2010	N	--	< 0.01 U	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.436	< 0.05 U	243	1,790
	5/22/2012	N	< 0.0100 U	--	0.0117	--	--	< 0.0100 U	< 0.200 U	--	0.027	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	213	1,230
	10/29/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	170	989
	5/16/2013	N	0.0105 J	--	0.00547 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	265	1,400
	11/17/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	500	1,500

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW026	5/18/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.014	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	750	2,120	
	1/23/2002	N	--	--	< 0.05 U	--	0.005	--	--	< 0.05 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	670	1,850	
	9/4/2002	N	--	--	< 0.05 U	--	0.009	--	--	--	--	--	--	--	--	--	--	--	700	--	
	12/17/2002	N	--	--	--	--	0.007	--	--	--	--	--	--	--	--	--	--	--	730	--	
	3/11/2003	N	--	--	--	--	0.008	--	--	--	--	--	--	--	--	--	--	--	700	--	
	5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	670	--	
	1/6/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1120	--	
	6/15/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	650	--	
	12/13/2004	N	--	--	0.01	--	0.018	--	--	--	--	--	--	--	--	--	--	--	680	--	
	6/3/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	630	--	
	1/19/2006	N	--	< 0.02 U	--	0.0176	--	< 0.02 U	--	0.664	0.0095	0.0095	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	766	1,780	
	6/23/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	708	2,020	
	4/5/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	737	--	
	9/11/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	731	--	
	3/25/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	805	2,240	
	8/11/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.006	0.006	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	825	2,320	
	8/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.15	< 0.05 U	866	2,620	
	8/13/2010	N	--	< 0.01 U	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.423	< 0.05 U	505	2,730	
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	576 J	2,170	
	10/29/2012	N	--	< 0.0100 U	--	--	< 0.0100 U	--	< 0.100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	568	2,000
	5/20/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	485	2,110	
	11/5/2013	N	0.00883 J	--	0.00598 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	544	3,020	
	11/5/2013	FD	< 0.0200 U	--	0.00502 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	528	2,850	
	5/9/2014	N	< 0.0200 U	--	0.00189 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	427	2,050	
	11/5/2014	N	0.0149 J	--	0.012	--	--	0.00770 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	572	2,760	
	5/20/2015	N	0.00808 J	--	0.00411 J	--	--	< 0.0100 U	< 0.200 UJ	--	0.00733 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	563	2,580	
	11/4/2015	N	0.00336 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	330	1,750	
	5/13/2016	N	0.0335	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	324	1,570	
	9/20/2016	N	< 0.00336 U	--	0.00424 J	--	< 0.01 U	--	< 0.00616 U	--	0.00524 J	--	--	--	--	--	--	--	737	1,230	
	9/22/2017	N	0.00716	--	< 0.004 U	--	< 0.01 U	--	< 0.1 U	--	< 0.002 U	--	--	--	--	--	--	--	108	890	
	4/5/2018	Reg	--	0.00716	--	0.00255 J	--	< 0.0100 U	< 0.100 U	--	--	< 0.00200 U	--	--	--	--	--	--	229	1,180	
	9/13/2018	Reg	0.00774 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.00160 J	--	--	--	--	--	--	--	129	860	
MW027	11/18/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	240	960	
	5/18/2001	N	--	< 0.05 U	--	< 0.05 U	--	0.026	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	370	1,260	
	1/24/2002	N	--	--	< 0.05 U	--	0.02	--	--	0.11	< 0.05 U	< 0.05 U	--	--	--	--	--	--	320	1,370	
	9/4/2002	N	--	--	< 0.05 U	--	0.01	--	--	--	--	--	--	--	--	--	--	--	170	--	
	12/17/2002	N	--	--	--	--	0.008	--	--	--	--	--	--	--	--	--	--	--	350	--	
	3/11/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	360	--	
	5/22/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	510	--	
	1/6/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	300	--	
	6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	300	--	
	12/20/2004	N	--	--	0.01	--	0.007	--	--	--	--	--	--	--	--	--	--	--	400	--	
	6/2/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	330	--	
	1/23/2006	N	--	< 0.02 U	--	0.0557	--	< 0.02 U	--	0.528	0.0104	0.0104	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	355	1,440	
	6/23/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.27	< 0.05 U	408	1,420	
	3/21/2007	N	--	< 0.02 U	--	0.0221	--	< 0.02 U	--	1.03	0.0207	0.0207	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	399	--	
	9/14/2007	N	--	< 0.02 U	--	0.0216	--	< 0.02 U	--	4.24	0.0949	0.0949	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	370	--	
	8/19/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	344	--	
	3/12/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.013	--	0.139	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.056 U	< 0.05 U	279	1,440	
	8/3/2010	N	--	< 0.01 U	--	< 0.050 U	--	0.021	--	0.125	< 0.050 U	< 0.050 U									

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW028	9/4/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,200	--
	12/18/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,070	--
	3/10/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,040	--
	5/22/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,030	--
	1/28/2004	N	--	--	< 0.01 U	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	990	--
	6/9/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,120	--
	12/6/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	880	--
	5/25/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	750	--
	1/18/2006	N	--	< 0.02 U	--	0.0301	--	< 0.02 U	--	0.318	0.0079	0.0079	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	655	2,070
	6/20/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0076	0.0076	< 1 U	< 1 U	< 1 U	< 3 U	0.32	< 0.05 U	629	2,060
	3/21/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.28	< 0.05 U	418	--
	9/6/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.29	< 0.05 U	389	--
	3/19/2008	N	--	0.0275	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.14	< 0.05 U	292	1,520
	8/12/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0071	0.0071	< 1 U	< 1 U	< 1 U	< 3 U	0.25	< 0.05 U	333	1,450
	3/19/2009	N	--	0.0211	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	8.5	2.8	1.2	< 3 U	< 0.095 U	< 0.05 U	253	1,450
	8/24/2009	N	--	0.0255	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.49	0.12	438	1,470
	3/11/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.177	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.145	< 0.05 U	377	1,600
	8/11/2010	N	--	0.025	--	< 0.050 U	--	0.012	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.199	< 0.05 U	336	1,780
	11/2/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	339	1,380
	5/20/2013	N	0.0199 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	224	1,240
MW029	11/18/1999	N	--	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	250	1,200
	5/18/2001	N	--	< 0.05 U	--	< 0.05 U	--	< 0.005 U	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	180	810
	2/6/2002	N	--	--	< 0.05 U	< 0.05 U	< 0.005 U	--	--	0.7	0.11	0.11	--	--	--	--	--	--	160	1,380
	9/9/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	160	--
	12/18/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	130	--
	3/10/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	150	--
	5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	160	--
	1/13/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	150	--
	6/10/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	100	--
	12/7/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	140	--
	5/24/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	140	--
	1/18/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	1.27	0.0183	0.0183	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	147	823
	6/20/2006	N	--	0.0243	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	155	792
	3/28/2007	N	--	0.0243	--	< 0.015 U	--	< 0.02 U	--	0.222	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	145	--
	9/6/2007	N	--	0.0208	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	138	--
	3/20/2008	N	--	0.021	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	3	< 3 U	< 0.096 U	< 0.05 U	138	749
	8/5/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	142	767
	3/16/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	7.9	3.1	1.3	< 3 U	< 0.096 U	< 0.05 U	138	728
	8/24/2009	N	--	0.0239	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	136	706
	3/10/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.037	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.05 U	< 0.05 U	102	512
8/13/2010	N	--	0.021	--	< 0.05 U	--	0.017	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.075	< 0.05 U	110	660	
5/24/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	141	713	
11/1/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	139	370	
5/14/2013	N	0.0189 J	--	0.0148	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	141	546	
MW030	4/24/2002	N	--	--	< 0.05 U	--	0.015	--	< 0.1 U	1.5	0.07	0.25	--	--	--	--	--	--	430	1,980
	9/9/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	290	--
	12/18/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	240	--
	3/10/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	220	--
	5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	250	--
	1/13/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--							

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	11/6/2014	N	0.0105 J	--	0.00148 J	--	--	< 0.0100 U	< 0.200 UJ	--	0.00360 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	91.5	446	
	6/1/2015	N	0.0296	--	0.00157 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	90.1	580	
	11/5/2015	N	0.0241	--	0.00148 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	82.4	539	
	5/16/2016	N	0.0222	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	356 X	875	
	5/16/2016	FD	0.0227	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	316	919	
	9/21/2016	N	0.0168	--	< 0.00136 U	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	261	865	
	5/11/2017	N	0.0144	--	0.00256 J	--	< 0.01 U	--	0.03 J	--	0.0012 J	--	--	--	--	--	--	--	249	588	
	9/21/2017	N	0.0194	--	0.00147 J	--	--	< 0.0100 U	0.0315 J	--	0.000561 J	--	--	--	--	--	--	--	202	778	
	3/29/2018	Reg	--	0.0179	--	0.00135 J	--	< 0.0100 U	< 0.1	--	--	0.000316 J	--	--	--	--	--	--	241	662	
9/13/2018	Reg	0.0189 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.00159 J	--	--	--	--	--	--	--	245	726		
MW030P	5/9/2014	N	0.0416	--	< 0.0100 U	--	--	< 0.0500 U	4.76	--	2.39	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	264	2,920	
	6/1/2015	N	0.0393	--	0.00189 J	--	--	< 0.0500 U	7.21	--	0.628	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	445	3,780	
	5/19/2016	N	0.105	--	0.00272 J	--	0.0171	--	--	--	--	--	--	--	--	--	--	--	388	3,960	
	5/4/2017	N	0.239	--	0.0101	--	0.027	--	65.3	--	0.465	--	--	--	--	--	--	--	478	2,020	
MW031	4/25/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	0.2	0.13	0.14	--	--	--	--	--	--	200	990	
	9/10/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	70	--	
	12/18/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	70	--	
	3/10/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	150	--	
	5/28/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	100	--	
	1/12/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	100	--	
	6/15/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	80	--	
	12/9/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	110	--	
	5/24/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	110	--	
	1/19/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.205	0.488	0.488	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	113	794	
	6/21/2006	N	--	0.0212	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.566	0.566	< 1 U	< 1 U	< 1 U	< 3 U	0.36	< 0.05 U	131	781	
	3/28/2007	N	--	0.0227	--	< 0.015 U	--	< 0.02 U	--	0.02	0.567	0.567	< 1 U	< 1 U	< 1 U	< 3 U	0.21	< 0.05 U	97.3	--	
	9/11/2007	N	--	0.0205	--	< 0.015 U	--	< 0.02 U	--	0.329	0.557	0.557	< 1 U	< 1 U	< 1 U	< 3 U	0.23	< 0.05 U	104	--	
	3/20/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.384	0.533	0.533	< 1 U	1.1	3.1	< 3 U	0.23	< 0.05 U	103	724	
	8/5/2008	N	--	0.0243	--	< 0.015 U	--	< 0.02 U	--	0.321	0.518	0.518	< 1 U	< 1 U	< 1 U	< 3 U	0.26	< 0.05 U	90.4	714	
	3/24/2009	N	--	0.0257	--	< 0.015 U	--	< 0.02 U	--	0.482	0.513	0.513	< 1 U	< 1 U	< 1 U	< 3 U	0.15	< 0.05 U	121	703	
	8/4/2009	N	--	0.0253	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.532	0.532	< 1 U	< 1 U	< 1 U	< 3 U	0.17	< 0.05 U	95.9	711	
	3/2/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.158	0.535	0.535	< 1 U	< 2 U	< 1 U	< 1 U	0.12	< 0.05 U	92	836	
	8/5/2010	N	--	0.022	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	0.4	0.4	< 1 U	< 2 U	< 1 U	< 1 U	0.24	< 0.05 U	90.3	666	
	5/24/2012	N	0.0227	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.499	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	103	826	
	10/31/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	0.692	0.588	0.588	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	107	684	
	5/14/2013	N	0.0122 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.438	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	106	802	
	10/31/2013	N	0.0124 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.222	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	98.3	761	
	5/12/2014	N	0.0145 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.166	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	106	780	
	11/6/2014	N	< 0.0200 U	--	0.00296 J	--	--	< 0.0100 U	< 0.200 UJ	--	0.0254	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	96.8	1,160	
	5/21/2015	N	0.00902 J	--	0.00100 J	--	--	< 0.0100 U	< 0.200 U	--	0.261	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	100	801	
	11/5/2015	N	< 0.0200 UJ	--	0.00481 J	--	--	< 0.0100 U	< 0.200 U	--	0.0126 J	--	--	--	--	--	--	--	--	106	801
	5/13/2016	N	0.0211	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	--	118	725
	9/21/2016	N	0.00691 J	--	< 0.00136 U	--	< 0.01 U	--	< 0.00616 U	--	0.0218	--	--	--	--	--	--	--	--	125	741
	5/11/2017	N	0.0144	--	0.00175 J	--	< 0.01 U	--	0.0059 J	--	0.000627 J	--	--	--	--	--	--	--	--	138	780
	9/21/2017	N	0.0227	--	< 0.00400 U	--	--	< 0.0100 U	0.0475 J	--	0.815	--	--	--	--	--	--	--	--	166	854
	3/29/2018	Reg	--	0.0511	--	< 0.00400 U	--	< 0.0100 U	0.538	--	--	1.36	--	--	--	--	--	--	--	228	840
	9/13/2018	Reg	0.102	--	< 0.0200 U	--	< 0.0100 U	--	--	4.17	1.02	--	--	--	--	--	--	--	--	233	832
	MW032	4/2/2002	N	--	--	--	< 0.05 U	--	< 0.005 U	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	280	1,320
9/4/2002		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	400	--	
12/18/2002		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	480	--</	

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/20/2013	N	< 0.0200 U	--	0.00705 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	226	959
	11/6/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	212	1,110
	5/12/2014	N	0.00904 J	--	< 0.0100 UJ	--	--	0.00930 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	299	1,310
	11/5/2014	N	< 0.0200 U	--	0.00150 J	--	--	< 0.0100 U	< 0.200 U	--	0.00963 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	221	1,150
	5/20/2015	N	0.0143 J	--	0.00319 J	--	--	< 0.0100 U	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	252	1,120
	11/4/2015	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	239	1,110
	5/13/2016	N	0.0156	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	< 0.408 U	< 1 U	< 0.657 U	< 0.642 U	< 0.987 U	< 0.987 U	231	1,110
	9/20/2016	N	< 0.00336 U	--	0.00301 J	--	< 0.01 U	--	0.0345 J	--	0.0205	--	--	--	--	--	--	--	244	1,050
	9/22/2017	N	0.00397	--	0.00188 J	--	< 0.01 U	--	0.0228 J	--	0.00117 J	--	--	--	--	--	--	--	250	1,400
	4/3/2018	Reg	--	0.00332	--	0.00177 J	--	< 0.0100 U	< 0.100 U	--	--	0.000594 J	--	--	--	--	--	--	285	1,190
9/13/2018	Reg	0.00389 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.00249 J	--	--	--	--	--	--	--	309	1,190	
MW033	4/3/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	0.5	0.5	0.52	350	3200	400	800	0.58	11	750	2,280
	4/3/2002	FD	--	--	< 0.05 U	--	< 0.005 U	--	0.2	0.7	0.51	0.52	300	2900	400	700	0.68	12.4	790	2,250
	9/23/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	700	8000	1000	1500	0.64	28	850	--
	1/8/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	800	5400	900	1100	0.57	18	840	--
	3/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	570	520	640	310	0.54	4.2	780	--
	6/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	480	70	480	30	0.61	2.3	710	--
	1/7/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	490	1000	300	330	0.54	6	730	--
	7/28/2004	N	--	--	< 0.01 U	--	0.006	--	--	--	--	--	440	87	280	50	0.56	3.2	610	--
	7/28/2004	FD	--	--	< 0.01 U	--	0.008	--	--	--	--	--	440	270	300	120	0.66	3.3	660	--
	1/13/2005	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	490	1600	470	530	0.49	9.8	840	--
	1/13/2005	FD	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	530	1800	530	570	0.37	10	880	--
	5/25/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	380	1300	400	430	0.47	9.3	770	--
	1/27/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	1.31	0.525	0.525	370	960	420	450	< 0.6 U	1.4	795	2,010
	1/27/2006	FD	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	1.23	0.482	0.482	360	920	400	430	< 0.6 U	1.7	790	2,100
	6/26/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	1.03	0.5	0.5	250	680	340	350	0.88	4.6	779	2,070
	4/23/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.661	0.478	0.478	190	320	380	200	1.1	3.1	495	--
	9/21/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.515	0.725	0.725	180	380	400	190	1.4	2.9	539	--
	3/19/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.689	1.44	1.44	170	380	420	200	1.3	3.4	723	1,950
	8/13/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.314	1.73	1.73	140	93	210	49	0.73	1.5	818	2,050
	4/1/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.389	1.15	1.15	180	190	280	110	0.99	2.4	699	1,940
	8/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	1.04	1.04	180	150	260	85	0.89	2	915	1,870
	3/17/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.042	--	0.193	1.44	1.44	126	115	217	82	0.586	1.11	637	2,160
	8/18/2010	N	--	< 0.01 U	--	< 0.050 U	--	0.052	--	< 0.1 U	0.886	0.886	108.5	81.7	177.7	66.2	0.487	1.12	542	1,920
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.576	--	11.2	< 2.00 U	4.51	< 1.00 U	--	--	430 J	1,770
	11/6/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	0.777	0.777	117	< 2.00 U	105	< 1.00 U	--	--	536	1,480
	5/20/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	0.0165	< 0.200 U	--	0.683	--	33.5	< 2.00 U	13.3	< 1.00 U	--	--	447	1,450
	4/3/2002	N	--	--	0.26	--	0.28	--	< 0.1 U	0.2	< 0.05 U	0.06	--	--	--	--	--	--	440	2,200
5/20/2002	N	--	--	0.33	--	--	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--
9/17/2002	N	--	--	0.33	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	470	--
12/5/2002	N	--	--	0.28	--	0.23	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.5 U	< 0.05 U	500	--
3/18/2003	N	--	--	--	--	0.26	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	580	--
6/2/2003	N	--	--	--	--	0.231	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	620	--
1/19/2004	N	--	--	0.07	--	0.062	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	550	--
6/24/2004	N	--	--	0.07	--	0.057	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	490	--
1/5/2005	N	--	--	0.14	--	0.11	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	540	--
6/7/2005	N	--	--	0.11	--	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	480	--
1/25/2006	N	--	< 0.02 U	--	--	0.0838	--	0.08	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	443	1,810
7/7/2006	N	--	< 0.02 U	--	--	0.0533	--	0.045	--	< 0.2 U	< 0.005 U	< 0.005 U	<							

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW003	5/25/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	2	18	11	10	< 0.25 U	0.19	30	--
	1/23/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.298	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	33.3	612
	6/22/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.7	< 0.05 U	80.3	917
	4/2/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0052	0.0052	< 1 U	< 1 U	< 1 U	< 3 U	0.26	< 0.05 U	59.2	--
	4/2/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.016	0.016	5.3	1.5	< 1 U	< 3 U	0.74	< 0.05 U	54.9	766
	3/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0482	0.0482	< 1 U	< 1 U	< 1 U	< 3 U	0.58	< 0.05 U	225	1,320
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.04	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	1.7	0.359	< 0.05 U	42.9	1,100
	5/25/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.109	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	188	1,120
	5/22/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0538	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	157	1,100
	5/22/2013	FD	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0549	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	162	1,140
MW036	8/29/2001	N	--	--	< 0.05 U	--	--	< 0.005 U	< 0.1 U	0.2	--	--	< 2 U	5	< 2 U	47	--	--	180	1000
	2/7/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	0.8	1.4	0.18	0.21	< 2 U	< 2 U	< 2 U	47	1.2	0.723	260	1,100
	9/19/2002	N	--	--	< 0.05 U	--	< 0.01 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	19	1.1	0.71	1,070	--
	1/7/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	3	< 2 U	< 2 U	110	1.6	0.9	500	--
	3/26/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	2	< 2 U	3	51	0.89	0.8	840	--
	6/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	19	0.69	0.7	590	--
	1/27/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	6	2	< 2 U	310	2.7	2.5	450	--
	7/27/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	7	< 2 U	4	360	1.6	2.4	430	--
	1/12/2005	N	--	--	0.01	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	1.5	0.42	760	--
	5/31/2005	N	--	--	0.02	--	--	--	--	--	--	--	< 2 U	< 2 U	3	49	2.1	0.51	610	--
	1/26/2006	N	--	< 0.02 U	--	0.0172	--	< 0.02 U	--	3.55	0.643	0.643	1.9	< 1 U	< 1 U	70	1.5	0.6	685	1,970
	7/12/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	3.54	0.607	0.607	9.6	1.3	2.6	98	3.2	0.85	663	1,740
	4/19/2007	N	--	0.0242	--	< 0.015 U	--	< 0.02 U	--	4.35	0.624	0.624	18	< 1 U	30	400	2	2.3	460	--
	4/16/2008	N	--	0.0405	--	< 0.015 U	--	< 0.02 U	--	6.17	0.327	0.327	26	< 1 U	4.6	440	3.2	3.7	183	1,040
	4/7/2009	N	--	0.0292	--	< 0.015 U	--	< 0.02 U	--	5.07	0.879	0.879	14	1	3.3	420	3.2	2.7	460	1,320
	3/16/2010	N	--	0.054	--	< 0.050 U	--	< 0.01 U	--	0.748	0.204	0.204	27	1.5	3.9	568.9	1.24	2.34	50	1,270
	5/25/2012	N	0.0408	--	< 0.0100 U	--	--	< 0.0100 U	1.2	--	0.329	--	62.1	2	14.7	592	--	--	88.9	772
	5/22/2013	N	0.00792 J	--	< 0.0100 U	--	--	< 0.100 U	< 0.200 U	--	0.454	--	67.6	< 2.00 U	120	205	--	--	51.7	795
	5/27/2014	N	0.0226	--	0.000905 J	--	--	< 0.0500 U	1.91	--	0.363	--	83.2	1.28 J	60.6	636	--	--	199	1000
	6/5/2015	N	0.0282	--	< 0.0100 U	--	--	< 0.0500 U	0.249 J	--	0.315	--	144	< 2.00 U	212	19.4	--	--	214	1,010
	5/20/2016	N	0.0471	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	119	< 1 U	104	136	< 0.987 U	2.09	413	1,450
	5/9/2017	N	0.00624	--	0.00153 J	--	< 0.01 U	--	29.7	--	0.358	--	407	< 10 U	588	41.1	< 1.5 U	4.41	165	914
MW037	8/29/2001	N	--	--	< 0.05 U	--	--	< 0.005 U	0.1	1	--	--	2000	< 100 U	400	700	0.56	6.48	740	2,140
	2/7/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	3.8	4	0.72	0.75	1700	< 40 U	360	190	0.71	3.82	770	2,050
	2/7/2002	FD	--	--	< 0.05 U	--	< 0.005 U	--	4	4.2	0.74	0.74	1500	< 40 U	310	150	0.69	3.69	760	2,070
	9/19/2002	N	--	--	< 0.05 U	--	< 0.01 U	--	--	--	--	--	3400	< 80 U	320	100	1.3	2.5	380	--
	9/19/2002	FD	--	--	< 0.05 U	--	< 0.01 U	--	--	--	--	--	3600	< 100 U	300	100	1.3	2	440	--
	1/8/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	3700	< 100 U	400	400	1.8	11	330	--
	1/8/2003	FD	--	--	--	--	< 0.005 U	--	--	--	--	--	3700	< 100 U	400	400	1.7	11	340	--
	3/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	2800	< 80 U	420	490	1.1	2.6	280	--
	3/27/2003	FD	--	--	--	--	< 0.005 U	--	--	--	--	--	2900	< 80 U	430	520	1.4	2.9	280	--
	6/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	2100	< 80 U	350	270	1.3	4.4	350	--
	6/5/2003	FD	--	--	--	--	< 0.005 U	--	--	--	--	--	2300	< 80 U	380	280	1.2	4.4	380	--
	1/27/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	3600	< 40 U	610	700	1.6	13	350	--
	1/27/2004	FD	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	3700	< 40 U	610	600	1.5	9.5	360	--
	7/28/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	4300	< 100 U	600	600	5.9	15	400	--
	1/12/2005	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	1800	< 20 U	560	230	2.3	7	460	--
	5/26/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	1900	< 20 U	310	180	3.5	8	530	--
	1/27/2006	N	--	0.0504	--	< 0.015 U	--	< 0.02 U	--	8.41	0.882	0.882	3000	17	420	79	5.8	1.3	605	1,900
	7/13/2006	N	--	0.055	--	< 0.015 U	--	< 0.02 U	--	5.66	1.05	1.05	2200	< 5 U	140</					

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW038	6/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	11	< 2 U	< 2 U	< 2 U	0.6	0.14	180	--
	1/27/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	7	< 2 U	< 2 U	< 6 U	0.83	0.06	150	--
	7/28/2004	N	--	--	0.28	--	< 0.005 U	--	--	--	--	--	13	< 2 U	< 2 U	< 6 U	0.29	0.08	600	--
	1/12/2005	N	--	--	0.19	--	< 0.01 U	--	--	--	--	--	5	< 2 U	< 2 U	< 6 U	0.31	< 0.05 U	530	--
	5/31/2005	N	--	--	0.31	--	--	--	--	--	--	--	5	< 2 U	< 2 U	< 6 U	0.3	< 0.05 U	490	--
	1/26/2006	N	--	< 0.02 U	--	0.216	--	< 0.02 U	--	2.39	0.274	0.274	4.2	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	508	2,300
	7/13/2006	N	--	< 0.02 U	--	0.121	--	< 0.02 U	--	0.841	0.211	0.211	8.4	< 1 U	< 1 U	< 3 U	0.45	< 0.05 U	510	2,270
	4/19/2007	N	--	< 0.02 U	--	0.313	--	< 0.02 U	--	2.63	0.209	0.209	20	< 1 U	2.9	6.3	0.69	0.11	414	--
	4/16/2008	N	--	< 0.02 U	--	0.179	--	0.13	--	0.598	0.177	0.177	< 1 U	< 1 U	< 1 U	< 3 U	0.39	< 0.05 U	260	2,060
	4/7/2009	N	--	< 0.02 U	--	0.185	--	0.13	--	< 0.2 U	0.163	0.163	< 1 U	< 1 U	< 1 U	< 3 U	0.35	< 0.05 U	301	1,760
	3/12/2010	N	--	< 0.05 U	--	--	--	0.052	--	0.214	0.148	0.148	< 11.9 U	< 1 U	< 1 U	< 1 U	1.83	< 0.05 U	180	1,410
	5/24/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	0.7	--	0.233	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	266	1,510
	5/23/2013	N	0.00898 J	--	< 0.0100 U	--	--	< 0.0100 U	5.25	--	0.171	--	0.609 J	< 2.00 U	< 1.00 U	< 1.00 U	--	--	147	1,020
	11/6/2013	N	0.00895 J	--	0.0205	--	--	0.0243	< 0.200 U	--	0.114	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	296	1,650
	11/6/2013	FD	< 0.0200 U	--	0.0176	--	--	0.0272	< 0.200 U	--	0.131	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	287	1,650
	5/6/2014	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0500 U	< 0.200 U	--	0.223	--	2.82	< 2.00 U	< 1.00 U	< 1.00 U	--	--	144	1,190
	6/5/2015	N	0.0129 J	--	0.00294 J	--	--	< 0.0500 U	< 0.200 UJ	--	0.16	--	4.61	< 2.00 U	< 1.00 U	< 1.00 U	--	--	146	1,070
	5/20/2016	N	< 0.00336 U	--	0.002 J	--	< 0.00548 U	--	--	--	--	--	4.62	< 1 U	< 0.657 U	< 0.642 U	< 0.987 U	< 0.987 U	161	1,160
	5/9/2017	N	0.0114	--	0.0042	--	0.0081 J	--	9.62	--	0.14	--	9.43	< 2 U	2.96	< 2 U	1.19 J	< 1.5 U	104	966
	5/9/2017	FD	0.0116	--	0.00449	--	0.0071 J	--	9.27	--	0.114	--	7.99	< 2 U	< 2 U	< 2 U	0.988 J	1.04 J	111	1,010
MW039A	8/30/2001	N	--	--	< 0.05 U	--	--	0.14	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	73	550
	1/31/2002	N	--	--	0.09	--	0.14	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 2 U	< 0.26 U	< 0.05 U	190	840
	9/10/2002	N	--	--	0.11	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	180	--
	12/26/2002	N	--	--	--	--	0.16	--	--	--	--	--	--	--	--	--	--	--	210	--
	3/17/2003	N	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	190	--
	6/2/2003	N	--	--	--	--	0.122	--	--	--	--	--	--	--	--	--	--	--	200	--
	1/20/2004	N	--	--	0.07	--	0.056	--	--	--	--	--	--	--	--	--	--	--	150	--
	6/24/2004	N	--	--	0.12	--	0.105	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	360	--
	6/24/2004	FD	--	--	0.12	--	0.101	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	350	--
	1/6/2005	N	--	--	0.1	--	0.1	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	180	--
	1/6/2005	FD	--	--	0.1	--	0.12	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	180	--
	6/8/2005	N	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	230	--
	1/25/2006	N	--	0.0219	--	0.198	--	0.18	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	312	1,390
	7/6/2006	N	--	0.0229	--	0.217	--	0.21	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	324	1,450
	7/6/2006	FD	--	0.0251	--	0.22	--	0.21	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	328	1,470
	4/12/2007	N	--	< 0.02 U	--	0.178	--	0.18	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	299	--
	4/3/2008	N	--	< 0.02 U	--	0.265	--	0.24	--	< 0.2 U	< 0.005 U	< 0.005 U	38	5.9	1.5	< 3 U	< 0.095 U	0.1	405	1,390
	4/2/2009	N	--	< 0.02 U	--	0.297	--	0.28	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	2.2	< 3 U	< 0.096 U	< 0.05 U	365	1,660
	3/8/2010	N	--	< 0.05 U	--	0.318	--	0.308	--	0.042	< 0.050 U	< 0.050 U	1.2	< 1 U	< 1 U	< 1 U	0.164	< 0.05 U	335	1,510
	5/25/2012	N	< 0.0100 U	--	0.102	--	--	0.0974	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	202	952
	5/25/2012	FD	< 0.0100 U	--	0.103	--	--	0.0984	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	194	976
	5/21/2013	N	0.0133 J	--	0.101	--	--	0.0989	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	186	1,030
	5/27/2014	N	0.0187 J	--	0.102	--	--	0.0948	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	202	927
	6/4/2015	N	0.0237	--	0.0964	--	--	0.0932	< 0.200 UJ	--	0.00913 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	210	942
MW040A	4/2/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	59	540
	9/5/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--
	12/18/2002	N	--	--	--	--	0.006	--	--	--	--	--	--	--	--	--	--	--	50	--
	3/11/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	49	--
	5/22/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	40	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/17/2013	N	0.0191 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	50.3	448
	11/4/2013	N	0.0183 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	48.2	488
	5/7/2014	N	0.0147 J	--	< 0.0100 UJ	--	--	0.0104	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	51.5	423
	11/10/2014	N	0.0181 J	--	0.00225 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	52.9	575
	5/26/2015	N	0.0129 J	--	0.00218 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	47.3	444
	11/9/2015	N	0.0252	--	0.00294 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	52.4	516
	5/16/2016	N	0.0208	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	46	653
	5/16/2016	FD	0.024	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	52.5	451
	9/20/2016	N	0.0184	--	< 0.00136 U	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	56	495
	5/9/2017	N	0.0176	--	0.00285 J	--	< 0.01 U	--	0.00278 J	--	< 0.002 U	--	--	--	--	--	--	--	53.7	574
	9/21/2017	N	0.0187	--	0.00164 J	--	--	< 0.0100 U	< 0.100 U	--	< 0.00200 U	--	--	--	--	--	--	--	203	540
	4/2/2018	Reg	--	0.0207	--	0.00231 J	--	< 0.0100 U	< 0.100 U	--	--	0.000290 J	--	--	--	--	--	--	50.3	504
9/13/2018	Reg	0.0195 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.00163 J	--	--	--	--	--	--	--	51.6	497	
MW041A	4/29/2002	N	--	--	0.59	--	0.32	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	690	2,330
	5/20/2002	N	--	--	0.46	--	--	0.39	--	--	--	--	--	--	--	--	--	--	--	--
	9/17/2002	N	--	--	0.34	--	0.22	--	--	--	--	--	--	--	--	--	--	--	420	--
	12/5/2002	N	--	--	0.31	--	0.2	--	--	--	--	--	--	--	--	--	--	--	410	--
	3/18/2003	N	--	--	--	--	0.12	--	--	--	--	--	--	--	--	--	--	--	420	--
	6/2/2003	N	--	--	--	--	0.22	--	--	--	--	--	--	--	--	--	--	--	390	--
	1/19/2004	N	--	--	0.64	--	0.3	--	--	--	--	--	--	--	--	--	--	--	640	--
	7/1/2004	N	--	--	0.61	--	0.26	--	--	--	--	--	--	--	--	--	--	--	630	--
	1/10/2005	N	--	--	0.58	--	0.81	--	--	--	--	--	--	--	--	--	--	--	640	--
	6/7/2005	N	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	--	--	640	--
	1/26/2006	N	--	< 0.02 U	--	0.663	--	0.6	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	686	2,560
	1/26/2006	FD	--	< 0.02 U	--	0.631	--	0.62	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	787	2,650
	7/7/2006	N	--	< 0.02 U	--	0.52	--	0.53	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	616	2,600
	4/17/2007	N	--	< 0.02 U	--	0.415	--	0.4	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	509	--
	4/15/2008	N	--	< 0.02 U	--	0.393	--	0.35	--	< 0.2 U	< 0.005 U	< 0.005 U	3.8	< 1 U	< 1 U	< 3 U	1.5	< 0.05 U	530	1,830
	4/1/2009	N	--	< 0.02 U	--	0.38	--	0.35	--	< 0.2 U	< 0.005 U	< 0.005 U	1.9	4	11	3.1	< 0.096 U	0.072	449	1,880
	3/11/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.443	--	0.388	0.075	0.075	< 1 U	< 1 U	< 1 U	< 1 U	0.078	< 0.05 U	408	2,180
	5/8/2012	N	< 0.0100 U	--	0.257	--	--	0.212	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	357	1,580
	5/16/2014	N	0.0150 J	--	0.298	--	--	0.273	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	442	1,810
	5/16/2014	FD	0.0136 J	--	0.293	--	--	0.271	< 0.200 U	--	0.0105 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	445	1,810
	5/11/2015	N	< 0.0200 U	--	0.164	--	--	0.0234	< 0.200 U	--	0.0121 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	376	1,570
	5/16/2016	N	0.0322	--	0.189	--	0.174	--	--	--	--	--	--	--	--	--	--	--	435	1,660
	5/5/2017	N	0.0093	--	0.197	--	0.203	--	0.0462	--	0.00232	--	--	--	--	--	--	--	408	1,630
	9/21/2017	N	0.0104	--	0.210 J	--	--	0.174	0.0310 J	--	0.0024	--	--	--	--	--	--	--	377	1,680
	3/29/2018	Reg	--	0.00948	--	0.206	--	0.184	< 0.1	--	--	0.00242	--	--	--	--	--	--	390	1,520
	9/12/2018	Reg	0.0103	--	0.206	--	0.167	--	--	< 0.100 U	0.00121 J	--	--	--	--	--	--	--	403	1,600
	MW042A	8/30/2001	N	--	--	< 0.05 U	--	--	0.13	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--	--	6,000
1/29/2002		N	--	--	< 0.05 U	--	0.021	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	5,400	11,700
9/5/2002		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	5,100	--
12/18/2002		N	--	--	--	--	0.014	--	--	--	--	--	--	--	--	--	--	--	4,800	--
3/12/2003		N	--	--	--	--	0.013	--	--	--	--	--	--	--	--	--	--	--	3,600	--
5/28/2003		N	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	3,900	--
1/20/2004		N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	390	--
6/15/2004		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	660	--
12/9/2004		N	--	--	0.08	--	0.053	--	--	--	--	--	--	--	--	--	--	--	4,700	--
6/3/2005		N	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	1,930	--
1/19/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.89	0.0091	0.0091	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	5.3	80
6/22/2006		N	--	< 0.02 U	--	0.156	--	0.14	--	< 0.2 U	0.0056	0.0056	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	3,730	8,440
6/22/2006		FD	--	< 0.02 U	--	0.157	--	0.13	--	< 0.2 U	0.0057	0.0057	< 1 U	<						

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW043	6/22/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.27	0.05	80	--
	12/28/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.79	0.062	220	--
	5/27/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	< 2 U	< 2 U	2	< 6 U	0.43	0.058	180	--
	1/23/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	2.15	2.15	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	746	3,040
	6/30/2006	N	--	0.04	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0452	0.0452	< 1 U	< 1 U	< 1 U	< 3 U	0.2	< 0.05 U	170	1,160
	4/9/2007	N	--	0.0468	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0894	0.0894	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	103	--
	3/26/2008	N	--	0.0345	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.188	0.188	< 1 U	< 1 U	< 1 U	< 3 U	0.87	< 0.05 U	212	1,250
	3/24/2009	N	--	0.022	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.311	0.311	< 1 U	< 1 U	< 1 U	< 3 U	0.93	< 0.05 U	240	1,410
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.264	0.358	0.358	< 1 U	< 2 U	< 1 U	< 1 U	0.501	< 0.05 U	280	1,690
	5/23/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.569	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	193	1,140
	5/13/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.637	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	158	1,150
	5/13/2014	N	0.0146 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.955	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	401	1,600
	5/11/2015	N	< 0.0200 U	--	0.00100 J	--	--	< 0.0100 U	< 0.200 U	--	0.56	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	287	1,370
	5/19/2016	N	0.0133	--	0.00709 J	--	< 0.00548 U	--	--	--	--	--	< 0.408 U	< 1 U	< 0.657 U	< 0.642 U	< 0.987 U	< 0.987 U	1,230	2,800
	5/9/2017	N	0.00198 J	--	0.00207 J	--	--	--	1.31	--	0.549	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	0.987 J	712	556
	9/26/2017	N	0.00427	--	0.00202 J	--	--	--	0.739 J	--	0.626	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	530 J	1,650
	9/26/2017	FD	0.00366	--	0.00214 J	--	--	--	1.28 J	--	0.653	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	679 J	1,780
	4/3/2018	Reg	--	0.00535	--	--	0.00110 J	--	0.345	--	--	0.608 J	< 2 U	< 2 U	< 2 U	0.87 J	< 1.50 U	< 1.50 U	724	1,960
	9/11/2018	Reg	0.00508	--	0.000688 J	--	< 0.0100 U	--	--	0.152	0.545	--	< 2 UJ	< 2 U	< 2 UJ	3.47 J	--	< 1.50 U	610	1,620
	9/11/2018	FD	0.00524	--	0.000605 J	--	< 0.0100 U	--	--	0.156	0.553	--	< 2 U	< 2 U	< 2 U	3.19	--	< 1.50 U	641	1,670
MW044	4/3/2002	N	--	--	0.83	--	0.74	--	< 0.1 U	0.2	0.24	0.22	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,110	3,260
	9/18/2002	N	--	--	1.09	--	0.81	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	680	3,500
	1/2/2003	N	--	--	--	--	0.16	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	0.42	< 0.05 U	790	--
	3/17/2003	N	--	--	--	--	1.1	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	990	--
	6/4/2003	N	--	--	--	--	0.474	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	810	--
	1/19/2004	N	--	--	0.03	--	0.034	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	460	--
	6/24/2004	N	--	--	0.1	--	0.16	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.41	< 0.05 U	420	--
	1/5/2005	N	--	--	0.72	--	0.67	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.72	< 0.05 U	860	--
	6/9/2005	N	--	--	0.41	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.61	< 0.05 U	880	--
	2/2/2006	N	--	< 0.02 U	--	0.242	--	0.16	--	< 0.2 U	0.283	0.283	< 1 U	< 1 U	< 1 U	< 3 U	0.67	< 0.6 U	695	2,310
	7/21/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.251	0.251	< 1 U	< 1 U	< 1 U	< 3 U	2.7	< 0.05 U	540	1,670
	4/6/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.217	0.288	0.288	< 1 U	< 1 U	< 1 U	< 3 U	3.1	< 0.05 U	430	--
	4/9/2008	N	--	< 0.02 U	--	0.13	--	0.11	--	< 0.2 U	0.548	0.548	< 1 U	< 1 U	< 1 U	< 3 U	1.1	< 0.05 U	448	1,900
	3/25/2009	N	--	< 0.02 U	--	0.108	--	0.084	--	< 0.2 U	0.393	0.393	< 1 U	< 1 U	< 1 U	< 3 U	2.4	< 0.05 U	505	1,700
	3/25/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.117	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	0.215	0.067	127	1,300
	5/13/2013	N	0.00818 J	--	< 0.0100 U	--	--	< 0.0100 U	0.0456 J	--	0.0173 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	420	1,560
	5/20/2014	N	< 0.0200 U	--	0.00323 J	--	--	< 0.0100 U	< 0.200 U	--	0.235	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	668	1,910
	5/8/2015	N	0.0110 J	--	0.0202	--	--	0.0421	< 0.200 U	--	0.103	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	472	1,410
	5/19/2016	N	0.0161	--	0.00182 J	--	< 0.00548 U	--	--	--	--	--	< 0.408 U	< 1 U	2.37	< 0.642 U	< 0.987 U	< 0.987 U	419	1,230
	5/9/2017	N	0.00578 J	--	0.0554	--	--	--	0.178	--	0.212	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	492 J	2,620
4/4/2018	Reg	--	0.00843	--	0.00235 J	--	< 0.0100 U	0.471	--	--	0.077	< 2 U	< 2 U	< 2 U	< 2 U	< 1.50 U	< 1.50 U	346	1,430	
MW045	4/4/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	0.2	0.29	0.3	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	430	1,920
	9/12/2002	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	2	< 2 U	< 2 U	< 0.24 U	< 0.05 U	550	--
	12/19/2002	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	540	--
	3/5/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	540	--
	5/27/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	&lt						

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW046	4/4/2002	N	--	--	0.06	--	< 0.005 U	--	< 0.1 U	0.1	0.52	0.52	< 2 U	< 2 U	< 2 U	20	0.77	0.194	210	1,640
	9/19/2002	N	--	--	0.07	--	0.069	--	--	--	--	--	< 2 U	< 2 U	< 2 U	6	1	0.35	140	--
	9/19/2002	FD	--	--	0.07	--	0.052	--	--	--	--	--	< 2 U	< 2 U	< 2 U	8	0.92	0.34	140	--
	1/7/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	2	17	< 2 U	16	1.9	0.43	150	--
	1/7/2003	FD	--	--	--	--	< 0.005 U	--	--	--	--	--	3	16	< 2 U	18	0.66	< 0.5 U	160	--
	3/20/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	5	< 2 U	< 2 U	27	1.2	0.45	140	--
	3/20/2003	FD	--	--	--	--	< 0.005 U	--	--	--	--	--	5	< 2 U	< 2 U	25	1.5	0.4	150	--
	6/4/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	6	< 2 U	< 2 U	12	1.3	0.3	120	--
	6/4/2003	FD	--	--	--	--	< 0.005 U	--	--	--	--	--	6	< 2 U	< 2 U	12	2.4	0.4	120	--
	1/27/2004	N	--	--	0.05	--	< 0.005 U	--	--	--	--	--	6	< 2 U	10	61	2.5	0.5	130	--
	1/27/2004	FD	--	--	0.05	--	< 0.005 U	--	--	--	--	--	4	< 2 U	7	44	2.5	0.45	130	--
	7/27/2004	N	--	--	0.03	--	< 0.005 U	--	--	--	--	--	2	< 2 U	7	18	2.8	0.31	140	--
	1/12/2005	N	--	--	0.02	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	3.4	0.25	170	--
	5/26/2005	N	--	--	0.02	--	--	--	--	--	--	--	5	3	9	27	2.7	0.4	130	--
	5/26/2005	FD	--	--	0.02	--	--	--	--	--	--	--	9	3	10	27	2.6	0.41	120	--
	1/26/2006	N	--	0.043	--	< 0.015 U	--	< 0.02 U	--	2.34	1.22	1.22	2.5	< 1 U	3.5	11	6.2	< 0.6 U	296	1,220
	7/12/2006	N	--	0.0386	--	< 0.015 U	--	< 0.02 U	--	2.51	1.32	1.32	6	1.7	10	27	4.3	0.33	376	1,360
	4/19/2007	N	--	0.0427	--	< 0.015 U	--	< 0.02 U	--	3.1	1.71	1.71	< 1 U	< 1 U	< 1 U	< 3 U	3.3	0.4	550	--
	4/17/2008	N	--	0.0388	--	< 0.015 U	--	< 0.02 U	--	3.31	1.6	1.6	21	1.1	52	26	4.6	0.55	580	1,760
	4/7/2009	N	--	0.0325	--	< 0.015 U	--	< 0.02 U	--	2.76	1.81	1.81	22	1.4	55	89	5.2	0.65	551	1,700
	3/12/2010	N	--	< 0.05 U	--	< 0.050 U	--	0.016	--	0.136	1.35	1.35	30.8	1.8	74	61.6	2.6	1.19	534	1,840
	5/23/2012	N	0.0122 J	--	< 0.0100 U	--	--	< 0.0100 U	1.63	--	1.05	--	39.8	< 2.00 U	79.1	13.1	--	--	394	1,570
	5/21/2013	N	0.0234	--	< 0.0100 U	--	--	< 0.100 U	< 0.200 UJ	--	0.741	--	52	< 2.00 U	140	69.3	--	--	307	1,440
	5/23/2014	N	0.0247	--	0.00165 J	--	--	0.0100 J	< 0.200 U	--	0.568	--	69.2	< 2.00 U	117	25.4	--	--	177	1,290
	6/4/2015	N	0.027	--	0.00664 J	--	--	< 0.0100 U	< 0.200 UJ	--	0.536	--	125	< 2.00 U	126	48.6	--	--	159	1,200
	5/20/2016	N	0.0312	--	0.00292 J	--	< 0.00548 U	--	--	--	--	--	42.3	< 1 U	25.1	22.1	< 0.986 U	< 0.986 U	138	1,450
	5/9/2017	N	0.0438	--	0.005 J	--	--	--	3.5	--	0.776	--	63	< 2 U	120	17.7	1.38 J	2.09	175	1,200
MW046A	12/9/2002	N	--	< 0.05 U	0.07	--	0.058	--	--	--	--	--	< 2 U	3	< 2 U	< 2 U	< 0.5 U	0.07	340	1,470
	3/13/2003	N	--	--	--	--	0.072	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	510	--
	5/29/2003	N	--	--	--	--	0.078	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	0.27	0.07	560	--
	1/27/2004	N	--	--	0.06	--	0.014	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	530	--
	7/27/2004	N	--	--	0.04	--	0.006	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.4	< 0.05 U	400	--
	1/11/2005	N	--	--	0.18	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	0.46	< 0.05 U	580	--
	5/24/2005	N	--	--	0.23	--	--	--	--	--	--	--	3	< 2 U	< 2 U	< 6 U	0.35	< 0.05 U	570	--
	5/24/2005	FD	--	--	0.22	--	--	--	--	--	--	--	2	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	550	--
	1/26/2006	N	--	< 0.02 U	--	0.387	--	0.38	--	< 0.2 U	0.0539	0.0539	1.9	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	676	2,740
	7/12/2006	N	--	< 0.02 U	--	0.441	--	0.44	--	< 0.2 U	0.0339	0.0339	< 1 U	< 1 U	< 1 U	< 3 U	0.33	< 0.05 U	637	2,540
	4/17/2007	N	--	< 0.02 U	--	0.586	--	0.45	--	< 0.2 U	0.0257	0.0257	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	595	--
	4/2/2008	N	--	< 0.02 U	--	0.485	--	0.48	--	< 0.2 U	0.0159	0.0159	8.7	2.4	< 1 U	< 3 U	0.097	< 0.05 U	676	2,330
	3/31/2009	N	--	< 0.02 U	--	0.591	--	0.56	--	< 0.2 U	0.0167	0.0167	< 1 U	< 1 U	< 1 U	< 3 U	0.28	< 0.05 U	568	2,590
	3/8/2010	N	--	< 0.05 U	--	0.784	--	0.747	--	0.067	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	0.138	< 0.05 U	468	2,280
	5/23/2012	N	< 0.0100 UJ	--	0.0634	--	--	0.0571	< 0.200 U	--	< 0.0200 U	--	1.13	< 2.00 U	2.77	< 1.00 U	--	--	337	1,420
	5/22/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	0.0573	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	323	1,460
	5/22/2014	N	0.00714 J	--	0.0627	--	--	0.0585	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	333	1,430
	5/22/2014	FD	< 0.0200 U	--	0.0612	--	--	0.058	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	334 J	1,400
	6/4/2015	N	0.00810 J	--	0.0562	--	--	0.0534	< 0.200 UJ	--	0.00937 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	372	1,330
	5/20/2016	N	0.011	--	1.72	--	1.64	--	--	--	--	--	< 0.408 U	< 1 U	< 0.657 U	< 0.642 U	< 0.987 U	< 0.987 U	575	3,370
	5/9/2017	N	0.0103	--	1.69	--	--	--	0.105	--	0.0253	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	704	3,100
	9/26/2017	N	0.0113	--	1.84	--	--	--	0.0416 J	--	0.00285	--	< 2 U	< 2 U	< 2 U	< 2 U	< 1.5 U	< 1.5 U	639	3,040
	4/4/2018	Reg	--	0.01	--	1.74	--	1.57	< 0.100 U	--</										

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/27/2014	N	0.00563 J	--	0.0518	--	--	0.0441	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	285	1,730
	6/1/2015	N	0.0188 J	--	0.0641	--	--	0.0556	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	244	1,520
	6/1/2015	FD	0.0115 J	--	0.0646	--	--	0.0568	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	269	2,020
	5/20/2016	N	0.0146	--	0.129	--	0.109	--	--	--	--	--	--	--	--	--	--	--	493	2,690
	5/20/2016	FD	0.0115	--	0.129	--	0.1 K	--	--	--	--	--	--	--	--	--	--	--	499	2,770
	5/10/2017	N	0.00901	--	0.107	--	--	--	0.0041 J	--	< 0.002 U	--	--	--	--	--	--	--	498	2,440
	9/22/2017	N	0.0105	--	0.129	--	--	--	< 0.1 U	--	< 0.002 U	--	--	--	--	--	--	--	446	2,550
	4/4/2018	Reg	--	0.0107	--	0.0896	--	0.0746	< 0.100 U	--	--	0.000787 J	--	--	--	--	--	--	388	2,050
	9/14/2018	Reg	0.012	--	0.06	--	0.0507	--	--	< 0.100 U	< 0.00200 U	--	--	--	--	--	--	--	276	1,950
MW048SA	8/1/2002	N	--	< 0.01 U	0.16	0.16	0.156	--	--	--	--	--	< 2 U	4	< 2 U	< 2 U	< 0.28 U	< 0.05 U	490	1,690
	9/16/2002	N	--	--	0.17	--	0.12	--	--	--	--	--	< 2 U	3	< 2 U	< 2 U	--	--	430	--
	12/4/2002	N	--	--	0.18	--	0.16	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	1.5	< 0.05 U	430	--
	3/17/2003	N	--	--	--	--	0.11	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	450	--
	6/2/2003	N	--	--	--	--	0.147	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.23 U	< 0.05 U	470	--
	12/17/2003	N	--	--	0.16	--	0.085	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.26 U	< 0.05 U	400	--
	6/29/2004	N	--	--	0.18	--	0.13	--	--	--	--	--	--	--	--	--	--	--	470	--
	1/6/2005	N	--	--	0.18	--	0.22	--	--	--	--	--	--	--	--	--	--	--	480	--
	6/7/2005	N	--	--	0.16	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	540	--
	6/7/2005	FD	--	--	0.15	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	620	--
	1/25/2006	N	--	< 0.02 U	--	0.171	--	0.17	--	1.16	0.0173	0.0173	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	437	1,430
	7/11/2006	N	--	< 0.02 U	--	0.176	--	0.17	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	586	1,900
	4/10/2007	N	--	< 0.02 U	--	0.228	--	0.21	--	< 0.295 U	0.0072	0.0072	< 1 U	< 1 U	< 1 U	< 3 U	--	< 0.05 U	453	--
	9/20/2007	N	--	0.0207	--	0.253	--	0.23	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	464	--
	4/1/2008	N	--	< 0.02 U	--	0.272	--	0.26	--	0.264	< 0.005 U	< 0.005 U	6.9	1.9	< 1 U	< 3 U	< 0.099 U	< 0.05 U	497	1,640
	8/20/2008	N	--	< 0.02 U	--	0.305	--	0.32	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	510	1,720
	3/26/2009	N	--	< 0.02 U	--	0.294	--	0.3	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	589	1,740
	8/12/2009	N	--	< 0.02 U	--	0.31	--	0.32	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	492	1,740
	3/5/2010	N	--	0.053	--	0.345	--	0.348	--	0.115	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	510	2,060
	8/9/2010	N	--	0.011	--	0.3	--	0.339	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.053 U	< 0.05 U	485	1,880
	5/16/2012	N	< 0.0100 U	--	0.414	--	--	0.41	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	616 J	2,250
	11/8/2012	N	--	< 0.0100 U	--	0.455	--	0.449	--	0.34	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	610	2,070
	11/8/2012	FD	--	< 0.0100 U	--	0.44	--	0.451	--	0.289	0.0209 J	0.0209 J	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	624	1,980
	5/8/2013	N	< 0.0200 UJ	--	0.458	--	--	0.464	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	613	2,370
	11/4/2013	N	0.0117 J	--	0.475	--	--	0.47	< 0.200 U	--	0.0322	--	< 1.00 U	< 2.00 U	< 1.00 U	6.78	--	--	545	2,390
	5/15/2014	N	< 0.0200 UJ	--	0.464	--	--	0.492	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	595	2,350
	5/15/2014	FD	< 0.0200 UJ	--	0.475	--	--	0.494	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	600	2,220
	11/14/2014	N	0.0162 J	--	0.492	--	--	0.469	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	560	2,500
	5/12/2015	N	0.0166 J	--	0.468	--	--	0.474	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	623	2,180
	9/30/2015	N	--	--	--	0.495	--	0.472	--	1.67	0.0418	0.0418	--	--	--	--	--	< 1.40 U	620	2,460
	11/13/2015	N	< 0.0200 U	--	0.433	--	--	0.476	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	601	2,210
	5/16/2016	N	0.0269	--	0.61	--	0.513	--	--	--	--	--	--	--	--	--	--	--	641	2,380
	9/20/2016	N	< 0.00336 U	--	0.579	--	0.516	--	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	658	2,560
	9/20/2016	FD	< 0.00336 U	--	0.581	--	0.518	--	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	669	2,620
	5/5/2017	N	0.00985	--	0.576	--	--	--	--	0.0411	--	< 0.002 U	--	--	--	--	--	--	647	2,220
	5/5/2017	FD	0.00976	--	0.54	--	--	--	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	674	2,360
	9/20/2017	N	0.0111	--	0.559	--	--	--	--	< 0.1 U	--	0.000794 J	--	--	--	--	--	--	667	2,370
	3/23/2018	Reg	--	0.0117	--	--	0.457	--	0.453	< 0.1	--	--	0.000252 J	--	--	--	--	--	643	2,110
9/12/2018	Reg	0.0119	--	0.453	--	0.404	--	--	--	0.136	0.000896 J	--	--	--	--	--	--	583	1,960	
MW049SA	7/30/2002	N	--	< 0.01 U	0.15	0.05	0.049	--	--	--	--	--	< 2 U	880	<					

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/16/2016	N	0.0524	--	0.207	--	0.199	--	--	--	--	--	--	--	--	--	--	--	1,780	3,750
	5/5/2017	N	0.00926	--	0.185	--	--	--	0.0205	--	< 0.002 U	--	--	--	--	--	--	--	1,560	3,700
	9/20/2017	N	0.0107	--	0.196	--	--	--	< 0.1 U	--	0.000498 J	--	--	--	--	--	--	--	1,640	3,880
	3/23/2018	Reg	--	0.0112	--	0.186	--	0.193	< 0.1	--	--	0.000274 J	--	--	--	--	--	--	1,530	3,880
	9/12/2018	Reg	0.0116	--	0.188	--	0.171	--	--	< 0.100 U	0.000414 J	--	--	--	--	--	--	--	1,300	2,960
MW050SA	7/30/2002	N	--	< 0.01 U	0.05	0.16	0.145	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.26 U	< 0.05 U	1,600	4,190
	9/10/2002	N	--	--	0.13	--	0.09	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	1,160	--
	12/5/2002	N	--	--	0.07	--	0.073	--	--	--	--	--	--	--	--	--	--	--	850	--
	3/12/2003	N	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	1,190	--
	6/2/2003	N	--	--	--	--	0.218	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	12/17/2003	N	--	--	0.12	--	0.061	--	--	--	--	--	--	--	--	--	--	--	1,010	--
	6/24/2004	N	--	--	0.04	--	0.023	--	--	--	--	--	--	--	--	--	--	--	1,470	--
	1/5/2005	N	--	--	0.2	--	0.15	--	--	--	--	--	--	--	--	--	--	--	1,080	--
	6/8/2005	N	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	1,320	--
	1/25/2006	N	--	< 0.02 U	--	0.187	--	0.19	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,210	3,220
	7/10/2006	N	--	< 0.02 U	--	0.215	--	0.2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.69	< 0.05 U	1,500	4,470
	4/9/2007	N	--	< 0.02 U	--	0.285	--	0.22	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.28	< 0.05 U	1,230	--
	4/1/2008	N	--	< 0.02 U	--	0.27	--	0.22	--	< 0.2 U	0.0072	0.0072	17	4.1	1.5	< 3 U	0.56	0.052	1,500	3,810
	3/25/2009	N	--	< 0.02 U	--	0.262	--	0.24	--	< 0.2 U	0.0057	0.0057	< 1 U	< 1 U	< 1 U	< 3 U	0.74	< 0.05 U	1,260	4,130
	3/4/2010	N	--	< 0.05 U	--	0.232	--	0.25	--	0.144	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.43	< 0.05 U	1,210	3,730
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1030 J	2,950
	5/8/2013	N	< 0.0200 UJ	--	0.197	--	--	0.198	< 0.200 U	--	0.0153 J	--	2	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,300	3,640
	5/16/2014	N	0.0177 J	--	0.295	--	--	0.246	0.0295 J	--	0.0255	--	2.1	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,360	4,030
	5/11/2015	N	< 0.0200 U	--	0.00339 J	--	--	< 0.0100 U	< 0.200 U	--	0.0198 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	809	2,230
	10/2/2015	N	--	--	--	0.351	--	0.335 R	--	< 0.200 U	0.0108 J	0.0108 J	--	--	--	--	< 1.40 U	--	1,540	4,430
	5/18/2016	N	0.0172	--	0.31	--	0.311	--	--	--	--	--	--	--	--	--	--	--	1,340	3,690
	5/10/2017	N	0.0081	--	0.309	--	--	--	0.00504 J	--	0.0209	--	--	--	--	--	--	--	1,260	3,560
	9/21/2017	N	0.00926	--	0.409 J	--	--	0.346	< 0.100 U	--	0.0166	--	--	--	--	--	--	--	533	3,960
	4/3/2018	Reg	--	0.0086	--	0.287	--	0.196	< 0.100 U	--	--	0.0173	--	--	--	--	--	--	1,470	3,480
	4/3/2018	FD	--	0.00887	--	0.272	--	0.184	< 0.100 U	--	--	0.0164	--	--	--	--	--	--	1,440	3,500
	9/12/2018	Reg	0.00822	--	0.442	--	0.405	--	--	< 0.100 U	0.0204	--	--	--	--	--	--	--	1,510	3,580
MW051SA	10/10/2002	N	--	< 0.05 U	0.64	--	0.36	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,300	3,840
	12/3/2002	N	--	--	0.53	--	0.44	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	3/19/2003	N	--	--	--	--	0.49	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	6/3/2003	N	--	--	--	--	0.63	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	12/17/2003	N	--	--	0.78	--	0.34	--	--	--	--	--	--	--	--	--	--	--	1,400	--
	7/1/2004	N	--	--	0.73	--	0.39	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,220	--
	1/11/2005	N	--	--	0.7	--	0.56	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	1,530	--
	6/7/2005	N	--	--	0.67	--	--	--	--	--	--	--	--	--	--	--	--	--	1,420	--
	1/26/2006	N	--	< 0.02 U	--	0.694	--	0.66	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,490	4,200
	7/11/2006	N	--	< 0.02 U	--	0.688	--	0.69	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	1,630	4,270
	4/17/2007	N	--	< 0.02 U	--	0.895	--	0.68	--	0.272	0.007	0.007	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	1,540	--
	4/9/2008	N	--	< 0.02 U	--	0.654	--	0.63	--	< 0.2 U	< 0.005 U	< 0.005 U	1.3	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	1,370	3,710
	4/2/2009	N	--	< 0.02 U	--	0.721	--	0.7	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	2.3	< 3 U	0.21	< 0.05 U	1,240	4,140
	3/4/2010	N	--	< 0.05 U	--	0.767	--	0.78	--	0.115	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.145	< 0.05 U	1,250	3,870
	5/16/2012	N	< 0.0100 U	--	0.783	--	0.791	< 0.200 U	--	< 0.0200 U	--	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1260 J	3,970
	5/16/2012	FD	< 0.0100 U	--	0.781	--	--	0.813	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	1,250	4,180
	5/8/2013	N	< 0.0200 UJ	--	0.759	--	--	0.743	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,060	3,540
	5/8/2013	FD	< 0.0200 UJ	--	0.75	--	--	0.772	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	966	3,530
	5/15/2014	N	< 0.0200 UJ	--	0.735	--	--	0.753	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,090	3,530
	5/11/2015	N	0.0107 J	--	0.62	--	--	0.644	< 0.200 U	--	0.00676 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	917	3,140
	9/30/2015	N	--	--	--	0.819	--	0.813	--	< 0.200 U	< 0.0200 U	< 0.0200 U	--	--	--	--	< 1.41 U	--	1,060	3,670
	5/18/2016	N	0.0263	--	0.764	--	0.837	--	--	--	--	--	--	--	--	--	--	--	1,050	3,810
	5/10/2017	N	0.0114	--	0.818	--	--	--	0.00232 J	--	0.000337 J	--	--	--	--	--	--	--	1,210	3,390
	9/20/2017	N	0.0119	--	0.793	--	--	--	< 0.1 U	--	0.000608 J	--	--	--	--	--	--	--	1,120	3,620
	4/3/2018	Reg	--	0.012	--	0.788	--	0.691	< 0.100 U	--	--	0.000993 J	--	--	--	--	--	--	1,360	3,320
	9/12/2018	Reg	0.0116	--	0.799	--	0.668	--	--	< 0.100 U	0.00236	--	--	--	--	--	--	--	1,120	3,300
	10/10/2002	N	--	< 0.05 U	0.4	--	0.23	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,300	3,400
	12/3/2002	N	--	--	0.33	--	0.25	--	--	--	--	--	--	--	--	--	--	--	1,200	--
	3/18/2003	N	--	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	6/2/2003	N	--	--	--	--	0.326	--	--	--	--	--	--	--	--	--	--	--	1,300	--
	12/18/2003	N	--	--	0.42	--	0.3	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	7/1/2004	N	--	--	0.37	--	0.32	--	--	--	--	--	--	--	--	--	--	--	1,510	--
	1/11/2005	N	--	--	0.4	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	1,600	--
	6/1/2005	N	--	--	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	1,560	--
	1/26/2006	N	--	< 0.02 U	--	0.4	--	0.39	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	2,440	4,280
	7/11/2006	N	--	< 0.02 U	--	0.373	--	0.36	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	1,590	4,240
	7/11/2006	FD	--	< 0.02 U	--	0.372	--	0.36	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	1,580	4,140

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW052SA	4/10/2007	N	--	< 0.02 U	--	0.378	--	0.36	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	1,600	--	
	4/8/2008	N	--	< 0.02 U	--	0.376	--	0.3	--	< 0.2 U	< 0.005 U	< 0.005 U	1.4	< 1 U	< 1 U	< 3 U	0.26	< 0.05 U	1,690	4,110	
	3/26/2009	N	--	< 0.02 U	--	0.34	--	0.35	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	1,980	4,210	
	3/5/2010	N	--	< 0.05 U	--	0.393	--	0.39	--	0.096	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.054	< 0.05 U	1,530	4,690	
	5/16/2012	N	< 0.0100 U	--	0.272	--	--	0.265	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	1300 J	4,600	
	5/8/2013	N	< 0.0200 U	--	0.254	--	--	0.255	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,410	3,650	
	5/15/2014	N	< 0.0200 UJ	--	0.231	--	--	0.24	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,390	3,840	
	5/12/2015	N	0.0209	--	0.223	--	--	0.229	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,430	3,820	
	9/30/2015	N	--	--	--	0.235	--	0.212	--	2.36	0.048	0.048	--	--	--	--	--	< 1.41 U	1,360	3,710	
	5/16/2016	N	0.0162	--	0.227	--	0.207	--	--	--	--	--	--	--	--	--	--	--	1,390	3,460	
	5/10/2017	N	0.0116	--	0.207	--	--	--	0.00339 J	--	0.000376 J	--	--	--	--	--	--	--	1,450	3,150	
	9/20/2017	N	0.0137	--	0.239	--	--	--	0.246	--	0.00892	--	--	--	--	--	--	--	1,630	3,720	
	3/23/2018	Reg	--	0.0135	--	0.222	--	0.225	< 0.1	--	--	0.000710 J	--	--	--	--	--	--	1,360	3,020	
	9/12/2018	Reg	0.0131	--	0.242	--	0.222	--	--	< 0.100 U	0.000660 J	--	--	--	--	--	--	--	1,400	3,020	
MW053SA	9/18/2002	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	300	1,250	
	12/2/2002	N	--	--	< 0.05 U	--	0.017	--	--	--	--	--	--	--	--	--	--	--	380	--	
	3/12/2003	N	--	--	--	--	0.14	--	--	--	--	--	--	--	--	--	--	--	440	--	
	5/21/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	530	--	
	12/18/2003	N	--	--	< 0.05 U	--	0.36	--	--	--	--	--	--	--	--	--	--	--	230	--	
	2/18/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	
	3/4/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	
	7/7/2004	N	--	--	< 0.05 U	--	0.014	--	--	--	--	--	--	--	--	--	--	--	200	--	
	1/11/2005	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	280	--	
	6/1/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	230	--	
	6/1/2005	FD	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	240	--	
	1/26/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	266	1,110	
	7/11/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	249	1,050	
	4/5/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	228	--	
	9/20/2007	N	--	0.0201	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	193	--	
	3/26/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	161	816	
	3/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0073	0.0073	3.5	1.5	< 1 U	< 3 U	< 0.096 U	< 0.05 U	194	938	
	8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	205	944	
	8/10/2010	N	--	0.019	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.058	< 0.05 U	241	998	
	5/16/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	269 J	1,210	
	11/9/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	314	1,090	
	5/8/2013	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	308	1,240	
	11/4/2013	N	0.0127 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	1.13	< 2.00 U	< 1.00 U	7.66	--	--	314	1,320	
	5/15/2014	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	351	1,280	
	11/14/2014	N	0.0167 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	310	1,330	
	5/13/2015	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	407	1,450	
	9/30/2015	N	--	--	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	--	--	--	--	--	< 1.40 U	428	1,420	
	11/13/2015	N	0.00576 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	434	2,510	
	MW054SA	1/27/2003	N	--	< 0.05 U	0.2	--	0.19	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,030	2,750
		3/19/2003	N	--	--	--	--	0.065	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	670	--
		5/21/2003	N	--	--	--	--	0.108	--	--	--	--	--	--	--	--	--	--	--	1,040	--
		12/16/2003	N	--	--	0.29	--	0.24	--	--	--	--	--	--	--	--	--	--	--	990	--
		2/17/2004	N	--	--	0.26	--	0.31	--	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--
		6/30/2004	N	--	--	0.17	--	0.12	--	--	--	--	--	--	--	--	--	--	--	940	--
1/10/2005		N	--	--	0.2	--	0.27	--	--	--	--	--	--	--							

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/12/2015	N	0.0162 J	--	0.142	--	--	0.143	< 0.200 U	--	0.00393 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	803	2,260
	11/13/2015	N	< 0.0200 U	--	0.126	--	--	0.139	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	798	2,230
	5/17/2016	N	0.0205	--	0.134	--	0.123	--	--	--	--	--	--	--	--	--	--	--	778	2,230
	5/17/2016	FD	0.013	--	0.137	--	0.124	--	--	--	--	--	--	--	--	--	--	--	756	1,160
	9/20/2016	N	< 0.00336 U	--	0.14	--	0.108	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	761	2,290
	5/10/2017	N	0.00952	--	0.122	--	--	--	0.0113 J	--	0.00035 J	--	--	--	--	--	--	--	826	1,990
	9/20/2017	N	0.0108	--	0.132	--	--	--	< 0.1 U	--	0.000414 J	--	--	--	--	--	--	--	866	2,190
	9/20/2017	FD	0.0103	--	0.128	--	--	--	< 0.1 U	--	0.000392 J	--	--	--	--	--	--	--	863	2,380
	3/23/2018	Reg	--	0.011	--	0.125	--	0.12	< 0.1	--	--	< 0.00200 U	--	--	--	--	--	--	777	2,200
	9/12/2018	Reg	0.0107	--	0.131	--	0.115	--	--	0.103	0.00315	--	--	--	--	--	--	--	800	1,970
9/12/2018	FD	0.0108	--	0.129	--	0.118	--	--	0.0672 J	0.00235	--	--	--	--	--	--	--	801	1,970	
MW055SA	1/6/2003	N	--	< 0.05 U	0.17	--	0.15	--	--	--	--	--	< 2 U	3	< 2 U	< 2 U	< 0.25 U	< 0.05 U	610	1,680
	3/19/2003	N	--	--	--	--	0.074	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	550	--
	5/21/2003	N	--	--	--	--	0.114	--	--	--	--	--	--	--	--	--	--	--	820	--
	12/16/2003	N	--	--	0.17	--	0.13	--	--	--	--	--	--	--	--	--	--	--	550	--
	3/10/2004	N	--	< 0.05 U	0.14	0.13	0.15	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	600	--
	6/29/2004	N	--	--	0.18	--	0.13	--	--	--	--	--	--	--	--	--	--	--	610	--
	1/6/2005	N	--	--	0.19	--	0.22	--	--	--	--	--	--	--	--	--	--	--	610	--
	6/7/2005	N	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	600	--
	1/25/2006	N	--	< 0.02 U	--	0.213	--	0.21	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	705	1,730
	6/28/2006	N	--	< 0.02 U	--	0.145	--	0.15	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.9	3.8	3.2	< 0.097 U	< 0.05 U	113	1,310
	6/28/2006	FD	--	< 0.02 U	--	0.151	--	0.15	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	4.5	4.3	3.6	< 0.097 U	< 0.05 U	560	1,440
	4/10/2007	N	--	< 0.02 U	--	0.202	--	0.19	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	593	--
	9/20/2007	N	--	< 0.02 U	--	0.227	--	0.19	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	576	--
	4/9/2008	N	--	< 0.02 U	--	0.23	--	0.22	--	< 0.2 U	< 0.005 U	< 0.005 U	1.6	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	589	1,610
	8/19/2008	N	--	< 0.02 U	--	0.224	--	0.22	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	582	1,810
	3/26/2009	N	--	< 0.02 U	--	0.228	--	0.25	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	719	1,810
	8/12/2009	N	--	< 0.02 U	--	0.243	--	0.25	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	589	1,830
	3/4/2010	N	--	< 0.05 U	--	0.252	--	0.274	--	0.147	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	634	2,070
	8/9/2010	N	--	0.01	--	0.22	--	0.25	--	0.121	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.077	< 0.05 U	531	1,900
	5/16/2012	N	< 0.0100 U	--	0.166	--	--	0.165	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	614 J	2,200
	5/16/2012	FD	< 0.0100 U	--	0.179	--	--	0.165	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	611 J	2,220
	11/7/2012	N	--	< 0.0100 U	--	0.165	--	0.161	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	620	1,690
	11/7/2012	FD	--	< 0.0100 U	--	0.166	--	0.161	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	613	1,930
	5/7/2013	N	< 0.0200 U	--	0.235	--	--	0.176	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	595	2,100
	10/31/2013	N	< 0.0200 U	--	0.149	--	--	0.160 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	565	1,920
	5/14/2014	N	0.0172 J	--	0.278	--	--	0.241	< 0.200 U	--	0.00419 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	602 J	2,480
	11/12/2014	N	0.0109 J	--	0.159	--	--	0.166	< 0.200 U	--	0.00502 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	557	2,010
	5/14/2015	N	0.0191 J	--	0.274	--	--	0.291	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	610	2,020
	11/12/2015	N	0.00673 J	--	0.161	--	--	0.162	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	580	1,910
	5/18/2016	N	0.008 J	--	0.192	--	0.202	--	--	--	--	--	--	--	--	--	--	--	541	2,020
	9/19/2016	N	< 0.00336 U	--	0.165	--	0.168	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	599	1,960
	5/9/2017	N	0.00647	--	0.159	--	--	--	0.00386 J	--	0.000225 J	--	--	--	--	--	--	--	613	1,800
	9/20/2017	N	0.00754	--	0.181	--	--	--	< 0.1 U	--	0.000399 J	--	--	--	--	--	--	--	650	1,920
	3/22/2018	Reg	--	0.00734	--	0.179	--	0.154	< 0.1	--	--	0.000368	--	--	--	--	--	--	620	1,650
	9/12/2018	Reg	0.00784	--	0.171	--	0.166	--	--	< 0.100 U	0.000439 J	--	--	--	--	--	--	--	622	1,660
	MW056SA	1/7/2003	N	--	< 0.05 U	0.32	--	0.17	--	--	--	--	--	< 2 U	16	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,300
3/17/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	200	--
5/21/2003		N	--	--	--	--	0.125	--	--	--	--	--	--	--	--	--	--	--	1,300	--
9/10/2003		N	--	--	0.33	--	--	0.22	--	--	--									

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/8/2013	N	< 0.0200 UJ	--	0.401	--	--	0.435	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,300	3,570
	11/4/2013	N	0.0154 J	--	0.412	--	--	0.29	< 0.200 U	--	< 0.0200 U	--	0.750 J	1.10 J	< 1.00 U	5.47	--	--	1,140	3,660
	11/4/2013	FD	0.0155 J	--	0.432	--	--	0.268	< 0.200 U	--	< 0.0200 U	--	1.90 J	1.66 J	< 1.00 U	5.58	--	--	1,150	3,620
	5/15/2014	N	< 0.0200 UJ	--	0.37	--	--	0.392	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,320	3,550
	11/13/2014	N	0.0227	--	0.336	--	--	0.343	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,120	3,820
	5/13/2015	N	< 0.0200 U	--	0.3	--	--	0.287	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,190	3,730
	11/10/2015	N	0.0246	--	0.372	--	--	0.363	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	1,280	3,500
	5/18/2016	N	0.0214	--	0.173	--	0.176	--	--	--	--	--	--	--	--	--	--	--	1,050	3,720
	9/19/2016	N	< 0.00336 U	--	0.217	--	0.205	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	970	3,720
	5/9/2017	N	0.0146	--	0.378	--	--	--	0.122 J	--	0.00068 J	--	--	--	--	--	--	--	1,180	3,800
	9/20/2017	N	0.0149	--	0.413	--	--	--	< 0.1 U	--	0.000501 J	--	--	--	--	--	--	--	1,240	3,970
	4/3/2018	Reg	--	0.0136	--	0.416	--	0.401	< 0.100 U	--	--	0.000495 J	--	--	--	--	--	--	1,260	3,560
9/12/2018	Reg	0.0155	--	0.417	--	0.401	--	--	0.0257 J	0.000575 J	--	--	--	--	--	--	--	1,130	3,380	
MW057SA	1/28/2003	N	--	< 0.05 U	< 0.05 U	--	0.007	--	--	--	--	--	< 5 U	2	< 5 U	< 5 U	< 0.25 U	< 0.05 U	610	2,020
	3/12/2003	N	--	--	--	--	0.27	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,300	--
	5/20/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	320	--
	9/10/2003	N	--	--	< 0.01 U	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--
	12/17/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	210	--
	6/16/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	240	--
	12/15/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	390	--
	6/1/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	240	--
	1/20/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	196	1,050
	6/28/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.1	3.5	3.1	< 0.097 U	< 0.05 U	139	876
	3/29/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.255	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	218	--
	9/11/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	9/12/2007	N	--	--	--	0.0201	--	< 0.02 U	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	232	--
	3/27/2008	N	--	< 0.02 U	--	0.0493	--	0.034	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	548	1,990
	8/6/2008	N	--	< 0.02 U	--	0.0478	--	0.052	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	472	1,720
	3/17/2009	N	--	< 0.02 U	--	0.0404	--	0.03	--	< 0.2 U	< 0.005 U	< 0.005 U	6.2	2.4	1.1	< 3 U	< 0.099 U	< 0.05 U	324	1,620
	8/21/2009	N	--	< 0.02 U	--	0.0393	--	0.034	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	581	--
	3/11/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.03	--	0.082	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	149	1,300
	8/10/2010	N	--	0.017	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	160	1,120
	5/17/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	181 J	1,110
	10/31/2012	N	--	< 0.0100 U	--	0.0129	--	0.0124	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	218	1,180
	5/8/2013	N	< 0.0200 UJ	--	0.0215	--	--	0.0215	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	260	1,330
	5/14/2014	N	0.0249	--	0.000825 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	61.9 J	565
	11/11/2014	N	0.0127 J	--	0.00119 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	77.5	722
	5/13/2015	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	66.4	639
	5/13/2015	FD	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	75.1	664
	11/12/2015	N	0.0108 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	76.8	668
	5/18/2016	N	0.0145	--	0.00766 J	--	0.0073 J	--	--	--	--	--	--	--	--	--	--	--	126	1,110
	5/18/2016	FD	0.014	--	0.0081 J	--	0.012	--	--	--	--	--	--	--	--	--	--	--	126	859
	9/19/2016	N	< 0.00336 U	--	0.013	--	0.0107	--	0.00619 J	--	< 0.000585 U	--	--	--	--	--	--	--	192	1,240
	5/9/2017	N	0.012	--	0.0247	--	--	--	0.0176 J	--	0.000496 J	--	--	--	--	--	--	--	272	1,210
	9/20/2017	N	0.0121	--	0.0349	--	--	--	0.0947 J	--	0.00413	--	--	--	--	--	--	--	324	1,480
	3/22/2018	Reg	--	0.0125	--	0.0268	--	0.0163	< 0.1	--	--	< 0.002	--	--	--	--	--	--	302	1,470
	9/12/2018	Reg	0.0127	--	0.0387	--	0.0276	--	--	< 0.100 U	0.000203 J	--	--	--	--	--	--	--	346	1,450
	MW058	1/28/2003	N	--	< 0.05 U	0.28	--	0.19	--	--	--	--	--	< 5 U	8	< 5 U	< 5 U	< 0.25 U	< 0.05 U	610
3/19/200																				

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	10/31/2013	N	0.021	--	2.7	--	--	2.78 J	< 0.200 U	--	0.0151 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,070	4,370
	5/13/2014	N	0.0118 J	--	< 0.0100 UJ	--	--	0.00820 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	175	909
	11/6/2014	N	0.0182 J	--	0.00907 J	--	--	0.00690 J	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	157	781
	11/6/2014	FD	0.0171 J	--	0.00873 J	--	--	0.00570 J	< 0.200 UJ	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	85.3	921
	6/1/2015	N	0.0154 J	--	0.00917 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	180	761
	11/5/2015	N	< 0.0200 UJ	--	0.00883 J	--	--	< 0.0100 U	< 0.200 U	--	0.00111 J	--	--	--	--	--	--	--	169	752
	5/16/2016	N	0.0816	--	2.46	--	2.72	--	--	--	--	--	--	--	--	--	--	--	1,190	4,720
	9/21/2016	N	< 0.00336 U	--	2.56	--	3.09	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	1,060	3,740
	5/11/2017	N	0.0121	--	2.72	--	--	--	0.516 J	--	0.00896	--	--	--	--	--	--	--	995 J	3530 J
	5/11/2017	FD	0.0119	--	2.85	--	--	--	0.343 J	--	0.00555	--	--	--	--	--	--	--	627 J	1670 J
3/29/2018	Reg	--	0.0124	--	2.83	--	2.99	0.0325	--	--	0.000881 J	--	--	--	--	--	--	1,230	3,980	
MW059	1/29/2003	N	--	< 0.05 U	0.07	--	0.055	--	--	--	--	--	< 5 U	3	< 5 U	< 5 U	< 0.25 U	< 0.05 U	440	1,820
	3/20/2003	N	--	--	--	--	0.088	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	600	--
	5/29/2003	N	--	--	--	--	0.128	--	--	--	--	--	--	--	--	--	--	--	910	--
	1/15/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	90	--
	6/16/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	80	--
	12/14/2004	N	--	--	0.08	--	0.14	--	--	--	--	--	--	--	--	--	--	--	420	--
	6/8/2005	N	--	--	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	420	--
	1/20/2006	N	--	< 0.02 U	--	0.101	--	0.095	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	435	1,840
	6/26/2006	N	--	< 0.02 U	--	0.124	--	0.12	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	446	1,780
	9/11/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	9/12/2007	N	--	--	--	0.185	--	0.19	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	255	--
	4/3/2008	N	--	< 0.02 U	--	0.2	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	3.2	1	< 1 U	< 3 U	< 0.096 U	< 0.05 U	499	2,040
	8/14/2008	N	--	< 0.02 U	--	0.546	--	0.45	--	< 0.2 U	0.0091	0.0091	1.6	1.6	2.8	< 3 U	< 0.1 U	< 0.05 U	1,010	4,140
	3/31/2009	N	--	< 0.02 U	--	0.206	--	0.2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	517	2,300
	8/12/2009	N	--	0.0232	--	0.21	--	0.22	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	497	2,260
	3/9/2010	N	--	< 0.05 U	--	0.205	--	0.237	--	0.117	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.61	< 0.05 U	493	1,980
	8/6/2010	N	--	< 0.01 U	--	0.45	--	0.193	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	915	4,190
	5/24/2012	N	< 0.0100 U	--	0.0465	--	--	0.0451	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	254	1,030
	11/2/2012	N	--	< 0.0100 U	--	0.493	--	0.495	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	839	3,620
	5/21/2013	N	0.0153 J	--	0.107	--	--	0.104	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	428	2,120
	10/31/2013	N	0.0178 J	--	0.105	--	--	0.106 J	< 0.200 U	--	0.0522	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	404	543
	5/13/2014	N	0.0131 J	--	< 0.0100 UJ	--	--	0.00810 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	133	661
	11/10/2014	N	0.0231	--	0.00574 J	--	--	0.00600 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	110	653
	5/27/2015	N	0.0158 J	--	0.00405 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	112	629
	11/9/2015	N	< 0.0200 U	--	0.00898 J	--	--	0.00590 J	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	122	598
	5/20/2016	N	0.0168	--	0.22	--	0.164	--	--	--	--	--	--	--	--	--	--	--	738	3,530
	9/21/2016	N	< 0.00336 U	--	0.541	--	0.728	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	987	3,990
	5/11/2017	N	0.0118	--	0.535	--	--	--	0.0336	--	0.000967 J	--	--	--	--	--	--	--	951	3,670
	9/21/2017	N	0.014	--	0.563 J	--	--	0.473	0.0436 J	--	0.000998 J	--	--	--	--	--	--	--	810	3,820
	3/29/2018	Reg	--	0.0132	--	0.562	--	0.448 J	< 0.1	--	--	0.000366 J	--	--	--	--	--	--	925	3,610
	9/13/2018	Reg	0.0141 J	--	0.556	--	0.469	--	--	< 0.500 U	0.00308 J	--	--	--	--	--	--	--	904	3,070
	MW060	1/8/2003	N	--	< 0.05 U	0.25	--	0.2	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	530
3/24/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	840	--
5/27/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	950	--
1/12/2004		N	--	--	0.02	--	0.012	--	--	--	--	--	--	--	--	--	--	--	370	--
6/23/2004		N	--	--	0.01	--	0.009	--	--	--	--	--	--	--	--	--	--	--	360	--
1/4/2005		N	--	--	0.02	--	0.01	--	--	--	--	--	--	--	--	--	--	--	760	--
6/30/2005		N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	740	--
1/24/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.24	0.0543	0.0543	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	<		

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	9/22/2017	N	0.00363	--	< 0.004 U	--	< 0.01 U	--	0.639	--	9.71	--	--	--	--	--	--	--	1,370	3,950
	3/29/2018	Reg	--	0.0056	--	< 0.00400 U	--	< 0.0100 U	1.26	--	--	9.7	--	--	--	--	--	--	1,750	3,600
	9/13/2018	Reg	0.00342 J	--	< 0.0200 U	--	< 0.0100 U	--	--	0.765	10.5	--	--	--	--	--	--	--	1,560	3,470
MW061	1/8/2003	N	--	< 0.05 U	4.02	--	2.6	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	430	2,160
	3/24/2003	N	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--	--	1,020	--
	3/24/2003	FD	--	--	--	--	0.34	--	--	--	--	--	--	--	--	--	--	--	1,040	--
	6/4/2003	N	--	--	--	--	0.725 3.04	--	--	--	--	--	--	--	--	--	--	--	1100 870	--
	6/4/2003	FD	--	--	--	--	0.759	--	--	--	--	--	--	--	--	--	--	--	1,050	--
	1/8/2004	N	--	--	4.44	--	1.7	--	--	--	--	--	--	--	--	--	--	--	1,160	--
	1/8/2004	FD	--	--	4.93	--	2.4	--	--	--	--	--	--	--	--	--	--	--	1,150	--
	7/8/2004	N	--	--	3.84	--	3.1	--	--	--	--	--	--	--	--	--	--	--	580	--
	1/11/2005	N	--	--	3.69	--	1.8	--	--	--	--	--	--	--	--	--	--	--	810	--
	6/9/2005	N	--	--	3.86	--	--	--	--	--	--	--	--	--	--	--	--	--	740	--
	1/26/2006	N	--	< 0.02 U	--	4.07	--	0.38	--	< 0.2 U	0.296	0.296	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	844	3,580
	7/5/2006	N	--	< 0.02 U	--	3.91	--	3.6	--	< 0.2 U	0.3	0.3	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	766	3,260
	4/18/2007	N	--	< 0.02 U	--	3.81	--	3.4	--	< 0.2 U	0.29	0.29	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.005 U	756	--
	9/21/2007	N	--	< 0.02 U	--	3.45	--	3.1	--	< 0.2 U	0.267	0.267	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	697	--
	8/7/2008	N	--	< 0.02 U	--	2.95	--	2.6	--	< 0.2 U	0.186	0.186	< 1 U	< 1 U	< 1 U	< 3 U	0.1	< 0.05 U	707	3,140
	4/1/2009	N	--	< 0.02 U	--	2.7	--	2.7	--	< 0.2 U	0.158	0.158	2	13	4.6	3.6	0.14	0.078	651	2,950
	8/19/2009	N	--	< 0.02 U	--	4.24	--	4.4	--	< 0.2 U	0.0615	0.0615	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	716	--
	3/9/2010	N	--	< 0.05 U	--	2.24	--	2.58	--	0.036	0.121	0.121	< 1 U	< 1 U	< 1 U	< 1 U	0.112	< 0.05 U	569	2,910
	8/11/2010	N	--	< 0.01 U	--	1.82	--	2.29	--	< 0.1 U	0.058	0.058	< 1 U	< 2 U	< 1 U	< 1 U	< 0.053 U	< 0.05 U	636	4,300
	5/25/2012	N	< 0.0100 U	--	0.243	--	--	0.251	< 0.200 U	--	0.0729	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	330	1,600
	11/2/2012	N	--	< 0.0100 U	--	4.79	--	5.01	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	823	3,800
	5/15/2013	N	0.0232	--	3.84	--	--	3.82	< 0.200 U	--	0.00544 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	554	2,550
	11/1/2013	N	0.00902 J	--	0.423	--	--	0.367	< 0.200 U	--	0.234	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	267	1,710
	5/13/2014	N	0.00808 J	--	0.11	--	--	0.111	< 0.200 U	--	0.0652	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	272	1,570
	5/13/2014	FD	0.0114 J	--	0.104	--	--	0.111	< 0.200 U	--	0.0609	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	273	1,900
	11/7/2014	N	< 0.0200 U	--	0.171	--	--	0.137	< 0.200 U	--	0.0712	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	213	1560 J
	5/20/2015	N	0.0246	--	2.25	--	--	2.41	< 0.200 UJ	--	0.0167 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	930	4,110
	11/6/2015	N	< 0.0200 UJ	--	0.17	--	--	0.142	< 0.200 U	--	0.101	--	--	--	--	--	--	--	202	1,310
	5/13/2016	N	0.0903	--	1.7	--	1.73	--	--	--	--	--	--	--	--	--	--	--	1,030	3,650
	9/21/2016	N	< 0.00336 U	--	1.68	--	2.2	--	< 0.00616 U	--	0.0157 J	--	--	--	--	--	--	--	1,130	4,210
	5/11/2017	N	0.0107	--	1.96	--	2.13	--	0.127	--	0.0221	--	--	--	--	--	--	--	883	3,840
	9/22/2017	N	0.0119	--	2.2	--	1.99	--	< 0.1 U	--	0.0292	--	--	--	--	--	--	--	927	4,900
	4/3/2018	Reg	--	0.011	--	1.68	--	1.49	< 0.100 U	--	--	0.0702 J	--	--	--	--	--	--	1,030	3,600
	4/3/2018	FD	--	0.0107	--	2.11	--	1.44	< 0.100 U	--	--	0.0394 J	--	--	--	--	--	--	1,140	3,660
	9/13/2018	Reg	0.0120 J	--	1.56	--	1.44	--	--	< 0.500 U	0.036	--	--	--	--	--	--	--	1,060	3,830
MW062A	3/6/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	63	--
	5/22/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--
	1/15/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	70	--
	6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	80	--
	12/21/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	80	--
	5/25/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	60	--
	1/24/2006	N	--	0.0277	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	64	512
	6/27/2006	N	--	0.0224	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	1.9	11	10	8.6	< 0.096 U	0.097	64.5	514
	4/20/2007	N	--	0.0276	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	3.4	< 1 U	2.3	< 3 U	< 0.097 U	< 0.05 U	56.8	--
	9/14/2007	N	--	0.0305	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	1	1	< 1 U	< 3 U	< 0.095 U	< 0.05 U	60.4	--
	4/9/2008	N	--	0.0252	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	3	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	62.5	487
	8/18/2008	N	--	0.0265	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.3	< 3 U	< 0.096 U	< 0.05 U	60.2	516
	4/2/2009	N	--	0.0268	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0065	0.0065	< 1 U	< 1 U	2.9	< 3 U	< 0.096 U	< 0.05 U	57.2	495
	8/3/2009	N																		

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	3/29/2018	Reg	--	0.0242	--	0.00207 J	--	< 0.0100 U	< 0.1	--	--	0.000335 J	--	--	--	--	--	--	55.8	471	
	9/12/2018	Reg	0.024	--	0.00213 J	--	< 0.0100 U	--	--	< 0.100 U	< 0.00200 U	--	--	--	--	--	--	--	57.9	497	
	3/29/2018	Reg	--	0.0233	--	0.00126 J	--	< 0.0100 U	< 0.1	--	--	0.000891 J	--	--	--	--	--	--	49.2	444	
	9/12/2018	Reg	0.0233	--	0.00162 J	--	< 0.0100 U	--	--	< 0.100 U	0.000592 J	--	--	--	--	--	--	--	51.7	472	
MW063SA	1/13/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	55	490	
	1/14/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	70	520	
	3/6/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	53	--	
	5/22/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	50	--	
	1/14/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	60	--	
	6/15/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	60	--	
	12/14/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	60	--	
	5/24/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	50	--	
	1/20/2006	N	--	0.0239	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	56	480	
	6/27/2006	N	--	0.0235	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	4	20	14	12	< 0.095 U	0.14	55.1	495	
	4/20/2007	N	--	0.0243	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	8.6	< 1 U	< 3 U	< 3 U	< 0.098 U	< 0.05 U	54.3	--	
	9/11/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	121	--	
	4/9/2008	N	--	0.0246	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	5.2	1.2	< 1 U	< 3 U	< 0.095 U	< 0.05 U	55.9	466	
	8/18/2008	N	--	0.0259	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.4	< 3 U	< 0.096 U	< 0.05 U	55.5	503	
	4/2/2009	N	--	0.0272	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	2.5	< 3 U	< 0.095 U	< 0.05 U	66.2	488	
	8/4/2009	N	--	0.0264	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.14	0.051	56.1	502	
	3/2/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.145	< 0.05 U	< 0.05 U	< 1 U	< 2 U	< 1 U	< 1 U	0.19	< 0.05 U	51.9	668	
	8/5/2010	N	--	0.023	--	--	< 0.05 U	0.013	--	< 0.1 U	< 0.05 U	< 0.05 U	< 1 U	< 2 U	< 1 U	< 1 U	0.128	< 0.05 U	51.4	416	
	5/18/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	58	430	
	10/31/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	53.4	459	
	5/13/2013	N	0.0241	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	52.6	456	
	10/30/2013	N	0.0180 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.00768 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	49.5	469	
	5/13/2014	N	0.0209	--	< 0.0100 U	--	--	0.00710 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	51.1	537	
	11/10/2014	N	0.0199 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	53.1	463	
	11/10/2014	FD	0.0148 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	53.6	489	
	5/28/2015	N	0.0292	--	0.000847 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	52.5	462	
	11/10/2015	N	0.0262	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	54.3	700	
	11/10/2015	FD	0.0221	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	54.5	660	
	5/16/2016	N	0.0257	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	52.3	479	
	9/21/2016	N	0.0261	--	< 0.00136 U	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	61.6	464	
	5/11/2017	N	0.021	--	0.00309 J	--	< 0.01 U	--	0.00612 J	--	0.000251 J	--	--	--	--	--	--	--	67.8	414	
	9/21/2017	N	0.0248	--	0.00154 J	--	--	< 0.0100 U	< 0.100 U	--	0.000408 J	--	--	--	--	--	--	--	51.7	518	
MW064SA	2/26/2003	N	--	< 0.05 U	0.09	--	0.071	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,400	3,100	
	3/24/2003	N	--	--	--	--	0.084	--	--	--	--	--	--	--	--	--	--	--	1,150	--	
	5/20/2003	N	--	--	--	--	0.116	--	--	--	--	--	--	--	--	--	--	--	1,300	--	
	9/10/2003	N	--	--	0.02	--	--	0.051	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/10/2003	N	--	--	0.31	--	0.26	--	--	--	--	--	--	--	--	--	--	--	1,080	--	
	12/10/2003	FD	--	--	0.31	--	0.26	--	--	--	--	--	--	--	--	--	--	--	1,070	--	
	3/10/2004	N	--	< 0.05 U	0.22	0.21	0.29	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--	
	6/7/2004	N	--	< 0.01 U	0.16	0.18	0.106	--	< 0.1 U	1.3	< 0.05 U	< 0.05 U	--	--	--	--	--	--	2,300	--	
	7/22/2004	N	--	< 0.01 U	0.12	0.07	0.072	--	< 0.1 U	3.5	< 0.05 U	0.12	--	--	--	--	--	--	1,300	--	
	8/24/2004	N	--	< 0.01 U	0.15	0.08	0.1	--	< 0.25 U	3.08	< 0.01 U	0.1	--	--	--	--	--	--	1,230	--	
	10/20/2004	N	--	< 0.01 U	0.13	0.08	0.095	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,230	--	
	12/9/2004	N	--	< 0.01 U	0.13	0.08	0.092	--	< 4 U	< 4 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	1,260	3,420	
	1/12/2005	N	--	&lt																	

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW065SA	5/6/2013	N	0.00818 J	--	0.0817	--	--	0.0813	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	730	2,610
	2/27/2003	N	--	< 0.05 U	< 0.05 U	--	0.01	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,300	2,880
	3/25/2003	N	--	--	--	--	0.012	--	--	--	--	--	--	--	--	--	--	--	1,190	--
	5/20/2003	N	--	--	--	--	0.014	--	--	--	--	--	--	--	--	--	--	--	1,200	--
	12/10/2003	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	960	--
	6/16/2004	N	--	--	< 0.05 U	--	0.009	--	--	--	--	--	--	--	--	--	--	--	930	--
	12/15/2004	N	--	--	0.04	--	0.02	--	--	--	--	--	--	--	--	--	--	--	1,190	--
	6/2/2005	N	--	< 0.01 U	0.03	0.03	0.043	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,170	3,140
	1/20/2006	N	--	< 0.02 U	--	0.0439	--	0.037	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,400	2,730
	6/28/2006	N	--	< 0.02 U	--	0.0397	--	0.032	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.4	3.8	3.2	< 0.096 U	< 0.05 U	1,180	3,100
	4/10/2007	N	--	< 0.02 U	--	0.0571	--	0.058	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	1,140	--
	9/11/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	9/12/2007	N	--	--	--	0.0675	--	0.065	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	599	--
	4/8/2008	N	--	< 0.02 U	--	0.0839	--	0.045	--	< 0.2 U	< 0.005 U	< 0.005 U	1.4	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	1,140	2,630
	8/19/2008	N	--	< 0.02 U	--	0.0893	--	0.083	--	< 0.2 U	0.0071	0.0071	< 1 U	< 1 U	1.1	< 3 U	< 0.1 U	< 0.05 U	1,120	3,190
	3/25/2009	N	--	--	--	0.0884	--	0.079	--	--	--	--	< 1 U	< 1 U	1.1	< 3 U	< 0.096 U	< 0.05 U	1,070	2,810
	3/26/2009	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--
	8/6/2009	N	--	< 0.02 U	--	0.0741	--	0.066	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	967	2,920
	3/4/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.062	--	0.12	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.05 U	< 0.05 U	1,070	2,900
	8/5/2010	N	--	< 0.01 U	--	< 0.05 U	--	0.033	--	< 0.1 U	< 0.05 U	< 0.05 U	< 1 U	< 2 U	< 1 U	< 1 U	0.069	< 0.05 U	1,060	3,230
	5/9/2012	N	< 0.0100 U	--	0.206	--	--	0.22	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,060	3,720
	5/9/2012	FD	< 0.0100 U	--	0.218	--	--	0.221	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,050	3,680
	11/1/2012	N	--	< 0.0100 U	--	0.27	--	0.269	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,090	3,180
	11/1/2012	FD	--	< 0.0100 U	--	0.274	--	0.284	--	< 0.200 U	0.0228 J	0.0228 J	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,070	3,320
	5/7/2013	N	0.0105 J	--	0.314	--	--	0.317	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,020	2,750
	10/31/2013	N	0.0167 J	--	0.179	--	--	0.18	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,020	3,670
	5/14/2014	N	0.0162 J	--	0.0355	--	--	0.0273	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1050 J	3,290
	11/12/2014	N	0.0208	--	0.0739	--	--	0.0743	< 0.200 U	--	0.00853 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	939	3,190
	5/15/2015	N	0.0125 J	--	0.0819	--	--	0.0748	< 0.200 U	--	0.00531 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,080	3,240
	11/11/2015	N	0.0125 J	--	0.0858	--	--	0.0716	< 0.200 U	--	0.000661 J	--	--	--	--	--	--	--	1,020	3500 J
	5/18/2016	N	0.018	--	0.0245	--	0.0139	--	--	--	--	--	--	--	--	--	--	--	896	3,570
	9/19/2016	N	< 0.00336 U	--	0.035	--	0.0168	--	0.0485 J	--	0.0139 J	--	--	--	--	--	--	--	814	3,080
	5/9/2017	N	0.0101	--	0.0631	--	0.0547 J	--	0.0149 J	--	0.0125	--	--	--	--	--	--	--	1,050	3,380
	5/9/2017	FD	0.00999	--	0.0606	--	0.572 J	--	0.00336 J	--	0.0121	--	--	--	--	--	--	--	1,060	3,050
4/5/2018	Reg	--	0.00851	--	0.114	--	0.11	< 0.100 U	--	--	0.0131	--	--	--	--	--	--	1,050	2,910	
MW066SA	3/3/2003	N	--	< 0.05 U	0.28	--	0.2	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,600	3,640
	3/25/2003	N	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	5/20/2003	N	--	--	--	--	0.286	--	--	--	--	--	--	--	--	--	--	--	1,600	--
	5/20/2003	FD	--	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	12/16/2003	N	--	--	0.26	--	0.16	--	--	--	--	--	--	--	--	--	--	--	1,560	--
	6/30/2004	N	--	--	0.23	--	0.19	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	6/30/2004	FD	--	--	0.22	--	0.18	--	--	--	--	--	--	--	--	--	--	--	1,500	--
	1/10/2005	N	--	--	0.21	--	0.18	--	--	--	--	--	--	--	--	--	--	--	1,560	--
	1/10/2005	FD	--	--	0.22	--	0.23	--	--	--	--	--	--	--	--	--	--	--	1,570	--
	1/26/2005	N	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/23/2005	N	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/30/2005	N	--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2005	N	--	--	--	--	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/25/2005	N	--	< 0.01 U	0.18	0.18	0.32	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,500	4,100
	6/30/2005	N	--	--	--	--	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2005	N	--	--	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/25/2006	N	--	< 0.02 U	--	0.177	--	0.19	--	0.203	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U					

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	11/11/2015	N	0.0166 J	--	0.00479 J	--	--	< 0.0100 U	< 0.200 U	--	0.64	--	--	--	--	--	--	--	1,210	3710 J
	5/17/2016	N	0.022	--	0.0579	--	0.0305	--	--	--	--	--	--	--	--	--	--	--	1,260	3,470
	9/19/2016	N	< 0.00336 U	--	0.0512	--	0.0446	--	< 0.00616 U	--	0.148	--	--	--	--	--	--	--	1,110	3,400
	9/19/2016	FD	< 0.00336 U	--	0.0517	--	0.0448	--	< 0.00616 U	--	0.141	--	--	--	--	--	--	--	1,130	3,490
	5/9/2017	N	0.00815	--	0.094	--	0.0932	--	0.0548 J	--	0.298	--	--	--	--	--	--	--	1,160	3,560
	9/20/2017	N	0.00898	--	0.0801	--	0.0635	--	< 0.1 U	--	0.0741	--	--	--	--	--	--	--	1,170	3,120
	3/22/2018	Reg	--	0.00898	--	0.0387	--	0.021	< 0.1	--	--	0.0118	--	--	--	--	--	--	1,050	1,050
	9/12/2018	Reg	0.00987	--	0.0186	--	0.0137	--	--	0.0408 J	0.115	--	--	--	--	--	--	--	884	2,350
MW067SA	3/4/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	4.1	< 0.05 U	340	1,350
	3/25/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	350	--
	5/20/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	480	--
	12/10/2003	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	310	--
	2/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--
	6/16/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	280	--
	12/16/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	260	--
	6/1/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	240	--
	1/20/2006	N	--	0.0211	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	233	1,190
	7/10/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.12 U	< 0.05 U	229	1,230
	4/5/2007	N	--	0.0209	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.098 U	< 0.05 U	210	--
	9/13/2007	N	--	0.0209	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	187	--
	3/27/2008	N	--	0.0201	--	< 0.015 U	--	< 0.02 U	--	0.226	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	194	1,120
	8/11/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	199	1,170
	3/19/2009	N	--	0.0202	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	3.2	1.4	< 1 U	< 3 U	< 0.096 U	< 0.05 U	198	1,120
	8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	186	1,050
	3/11/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.12	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	129	956
	8/10/2010	N	--	0.021	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.063	< 0.05 U	165	1000
	5/16/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	178 J	1000
	11/2/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	179	993
	5/8/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	164	988
	11/1/2013	N	0.0152 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	157	981
	5/15/2014	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	158	942
	11/13/2014	N	0.0165 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	214	994
	5/13/2015	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	164	1,040
	11/12/2015	N	0.0138 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	163	449
	5/17/2016	N	0.0216	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	143	1,030
	9/20/2016	N	0.0205	--	< 0.00136 U	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	174	995
	5/8/2017	N	0.0169	--	< 0.004 U	--	< 0.01 U	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	165	944
	9/20/2017	N	0.0194	--	0.000881 J	--	< 0.01 U	--	< 0.1 U	--	0.000652 J	--	--	--	--	--	--	--	163	1,070
	9/20/2017	FD	0.0196	--	0.00117 J	--	< 0.01 U	--	< 0.1 U	--	0.000925 J	--	--	--	--	--	--	--	163	1,050
MW068	3/5/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	320	1,160
	3/26/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	40,000	60,900
	5/29/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	37,000	--
	1/8/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	300	--
	6/15/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	220	--
	12/9/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	2,180	--
	5/24/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	1,800	--
	1/19/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.819	0.819	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,910	4,210
	6/21/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.244	0.244	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	932	2,280
	3/22/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0894	0.0894	<							

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	4/3/2018	Reg	--	0.0148	--	0.000799 J	--	< 0.0100 U	0.32	--	--	2.33 J	--	--	--	--	--	--	11,700	14,300	
	9/13/2018	Reg	0.0180 J	--	< 0.0200 U	--	< 0.0100 U	--	--	0.345 J	2.37	--	--	--	--	--	--	--	11,700	18,000	
MW069	3/5/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	1,040	2,600	
	3/25/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	32,000	54,000	
	5/29/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	28,000	--	
	1/8/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	1,030	--	
	6/15/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	890	--	
	6/15/2004	FD	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	840	--	
	12/9/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	4,700	--	
	12/9/2004	FD	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	4,100	--	
	5/26/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	3,300	--	
	1/19/2006	N	--	< 0.02 U	--	0.0481	--	< 0.02 U	--	0.847	0.118	0.118	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	4,330	9,030	
	6/21/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.114	0.114	< 1 U	< 1 U	< 1 U	< 3 U	0.26	< 0.05 U	2,400	5,470	
	3/22/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.62	1.55	1.55	< 1 U	< 1 U	< 1 U	< 3 U	0.49	< 0.05 U	1,490	--	
	9/7/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.208	0.208	< 1 U	< 1 U	< 1 U	< 3 U	0.5	< 0.05 U	2,600	--	
	8/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.288	0.288	6.3	10	22	6.4	0.61	0.12	3,470	6,690	
	5/24/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.564	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	986	3,960	
	5/14/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.539	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	877	2,190	
	5/13/2014	N	0.0132 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.576	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	817	1,460	
	5/21/2015	N	< 0.0200 U	--	0.00110 J	--	--	< 0.0100 U	< 0.200 U	--	1.25	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	956	3,090	
	5/13/2016	N	0.0646	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	20,900	29,000	
	9/21/2016	N	< 0.00336 U	--	0.0425	--	< 0.01 U	--	0.0305 J	--	0.107	--	--	--	--	--	--	--	8,970	18,700	
	5/11/2017	N	0.0157	--	0.00188 J	--	< 0.01 U	--	1.35	--	0.72	--	--	--	--	--	--	--	981	2,450	
	9/21/2017	N	0.0151	--	< 0.00400 U	--	--	< 0.0100 U	0.282	--	0.778	--	--	--	--	--	--	--	715	2,120	
	3/29/2018	Reg	--	0.014	--	< 0.00400 U	--	< 0.0100 U	0.456	--	--	0.78	--	--	--	--	--	--	846	1,730	
	9/13/2018	Reg	0.0149	--	< 0.00400 U	--	< 0.0100 U	--	--	0.563	0.774	--	--	--	--	--	--	--	804	1,990	
	MW070	3/6/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	58	670
		3/25/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	110	--
5/29/2003		N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	130	--	
1/13/2004		N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	150	--	
6/15/2004		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	130	--	
12/9/2004		N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	120	--	
5/24/2005		N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	130	--	
1/27/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0059	0.0059	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	155	682	
6/22/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	163	703	
3/29/2007		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	191	--	
9/11/2007		N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--	
9/12/2007		N	--	--	--	< 0.015 U	--	< 0.02 U	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	46	--	
3/25/2008		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	275	896	
8/5/2008		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	237	912	
3/16/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0058	0.0058	22	6.8	2.2	< 3 U	< 0.095 U	0.062	232	902	
8/20/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.28	< 0.05 U	197	827	
3/17/2010		N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	< 0.03 U	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.058	< 0.05 U	168	856	
8/13/2010		N	--	0.011	--	< 0.050 U	--	0.012	--	< 0.10 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.05 U	< 0.05 U	191	908	
5/23/2012		N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	212	939	
11/6/2012		N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	201	790	
5/14/2013		N	0.0208	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	192	821	
10/30/2013		N	0.0183 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0445	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	167	829	
10/30/2013		FD	0.0130 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0778	--	< 1								

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW070A	6/22/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	45.7	506
	3/29/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	46.4	--
	9/11/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	283	--
	3/25/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	54.2	515
	8/5/2008	N	--	0.0236	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	45	542
	3/16/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0081	0.0081	38	10	3.2	< 3 U	< 0.096 U	0.11	45.6	510
	8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	46.3	545
	3/17/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.219	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.077	< 0.05 U	< 25 U	636
	5/23/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	45.3	480
	5/14/2013	N	0.0203	--	0.00406 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	46.8	541
	5/8/2014	N	0.0153 J	--	0.00293 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	52.9	462
	6/1/2015	N	0.0191 J	--	0.00274 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	47.1	471
	5/16/2016	N	0.0225	--	0.00245 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	53.1	310
	5/11/2017	N	0.0182	--	0.00348 J	--	< 0.01 U	--	0.00351 J	--	0.000259 J	--	--	--	--	--	--	--	49.3	414
	5/1/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	0.07	860	1,720
MW071SA	5/20/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	750	--
	12/15/2003	N	--	--	0.15	--	0.073	--	--	--	--	--	--	--	--	--	--	--	360	--
	6/9/2004	N	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.005 U	--	2	< 0.25 U	0.05	< 0.01 U	--	--	--	--	--	--	140	--
	6/23/2004	N	--	--	0.01	--	0.008	--	--	--	--	--	--	--	--	--	--	--	140	--
	7/8/2004	N	--	--	< 0.05 U	--	0.008	--	--	--	--	--	--	--	--	--	--	--	140	--
	7/27/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	130	--
	8/9/2004	N	--	--	< 0.05 U	--	0.006	--	--	--	--	--	--	--	--	--	--	--	140	--
	8/24/2004	N	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/2004	N	--	--	--	--	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/6/2004	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/2004	N	--	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/4/2004	N	--	--	--	--	0.053	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/17/2004	N	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/2/2004	N	--	--	--	--	0.009	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2005	N	--	--	0.02	--	0.011	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	920	--
	2/7/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/7/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/14/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/10/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/2/2005	N	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.005 U	--	< 0.4 U	< 0.4 U	1.38	1.3	--	--	--	--	--	--	1,050	2,160
	7/7/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/25/2006	N	--	0.0242	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	4.06	4.06	31	1.1	3	30	1.1	0.6	1,050	2,000
	7/12/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	4.93	4.93	< 1 U	< 1 U	< 1 U	< 3 U	0.48	0.095	1,080	1,900
	4/3/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.238	4.73	4.73	< 1 U	< 1 U	< 1 U	< 3 U	0.48	< 0.05 U	998	--
	9/19/2007	N	--	0.022	--	< 0.015 U	--	< 0.02 U	--	0.274	4.86	4.86	< 1 U	< 1 U	< 1 U	< 3 U	0.7	< 0.05 U	1,040	--
	3/27/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	4.81	4.81	< 1 U	< 1 U	< 1 U	< 3 U	0.2	< 0.05 U	1,180	--
	3/28/2008	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,600
	8/12/2008	N	--	< 0.02 U	--	0.0193	--	< 0.02 U	--	< 0.2 U	2.44	2.44	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	1,170	2,900
	3/24/2009	N	--	< 0.02 U	--	0.106	--	0.097	--	< 0.2 U	0.638	0.638	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	929	2,440
	8/10/2009	N	--	< 0.02 U	--	0.094	--	0.1	--	< 0.2 U	0.668	0.668	< 1 U	< 1 U	< 1 U	< 3 U	0.15	< 0.05 U	1,000	2,810
	3/4/2010	N	--	< 0.05 U	--	0.214	--	0.238	--	0.135	< 0.05 U	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U	0.053	< 0.05 U	763	2,470
	8/5/2010	N	--	0.01	--	0.193	--	0.206	--	< 0.1 U	0.285	0.285	< 1 U	< 2 U	< 1 U	< 1 U	0.074	< 0.05 U	623	2,380
	5/8/2012	N	< 0.0100 U	--	0.0174	--	--	< 0.0100 U	< 0.200 U	--	0.0888	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	109	749
	11/1/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	0.168	0.168	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	111	732
	5/7/2013	N	0.0194 J	--	0.00425 J	--	--	< 0.0100 U	< 0.200 U	--	0.203	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	119	718
	10/30/2013	N	0.0215	--	0.00507 J	--	--	< 0.0100 U	< 0.200 U	--	0.22	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	103	738
	5/16/2014	N	0.0201	--	0.00635 J	--	--	< 0.0100 U	< 0.200 U	--	0.208	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	121	758
	11/12/2014	N	0.0125 J	--	0.00368 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	103	725
	5/14/2015	N	0.0138 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.206	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	153	803
	11/11/2015	N	0.0133 J	--	0.00181 J	--	--	< 0.0100 U	< 0.200 U	--	0.00600 J	--	--	--	--	--	--	--	108	713 J
	5/18/2016	N	0.0111	--	0.0313	--	0.0143	--	--	--	--	--	--	--	--	--	--	--	565	1,920
	9/19/2016	N	< 0.00336 U	--	0.0203	--	0.0104	--	0.00925 J	--	0.153	--	--	--	--	--	--	--	639	2,110
	5/9/2017	N	0.00711	--	0.00348 J	--	< 0.01 U	--	0.252 J	--	0.389	--	--	--	--	--	--	--	590	1,750
	9/20/2017	N	0.00923	--	0.00315 J	--	< 0.01 U	--	0.155	--	0.299	--	--	--	--	--	--	--	495	1,380
	3/22/2018	Reg	--	0.00852	--	0.00884	--	< 0.0100 U	< 0.1	--	--	0.142	--	--	--	--	--	--	560	1,410
	9/12/2018	Reg	0.00951	--	0.00142 J	--	< 0.0100 U	--	--	0.100 J	0.293	--	--	--	--	--	--	--	613	1,580
	5/1/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.23 U	< 0.05 U	590	1,690
	5/20/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	550	--
	12/15/2003	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	320	--
	6/17/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	350	--
	12/20/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	400	--
	2/23/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/30/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
MW072SA	4/25/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	
	5/25/2005	N	--	0.01	< 0.01 U	< 0.01 U	< 0.005 U	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	360	1,650	
	6/30/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/18/2005	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/23/2006	N	--	0.0216	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	340	1,490	
	6/28/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	2.5	3	< 3 U	< 0.096 U	< 0.05 U	389	1,430	
	4/3/2007	N	--	0.0205	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	331	--	
	9/14/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	306	--	
	3/27/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	327	1,420	
	8/12/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0051	0.0051	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	344	1,400	
	3/17/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	14	4.4	1.6	< 3 U	< 0.097 U	< 0.05 U	301	1,370	
	8/21/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	351	--	
	3/16/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.12	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	218	1,540	
	8/16/2010	N	--	0.03	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.062	< 0.05 U	225	1,240	
	5/15/2012	N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	332 J	1,130	
	11/2/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	375	1,290	
	5/8/2013	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	302	1,380	
	10/31/2013	N	0.0167 J	--	< 0.0100 U	--	0.0167 J	< 0.0100 U	< 0.200 U	--	0.0345	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	320	1,450	
	5/15/2014	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 UJ	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	337	1,250	
	11/12/2014	N	0.022	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	232	1,090	
	5/14/2015	N	0.0206	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	271	1,220	
	11/11/2015	N	0.0213	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	249	1250 J	
	5/17/2016	N	0.0203	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	182	1,220	
	9/19/2016	N	0.00771 J	--	< 0.00136 U	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	239	1,230	
	5/9/2017	N	0.0154	--	0.00268 J	--	< 0.01 U	--	0.0048 J	--	< 0.002 U	--	--	--	--	--	--	--	262	1,150	
	9/20/2017	N	0.017	--	0.00101 J	--	< 0.01 U	--	< 0.1 U	--	0.00051 J	--	--	--	--	--	--	--	273	1,190	
	3/22/2018	Reg	--	0.0148	--	0.000617 J	--	< 0.0100 U	0.0909	--	--	0.00382	--	--	--	--	--	--	231	882	
	9/12/2018	Reg	0.0179	--	< 0.00400 U	--	< 0.0100 U	--	--	< 0.100 U	0.000362 J	--	--	--	--	--	--	--	238	1,090	
	MW073SA	4/30/2003	N	--	< 0.05 U	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	2	< 2 U	< 2 U	< 0.23 U	< 0.05 U	370	1,220
		5/20/2003	N	--	--	--	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	490	--
12/15/2003		N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	320	--	
6/17/2004		N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	390	--	
12/16/2004		N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	320	--	
5/31/2005		N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	310	--	
1/20/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.219	0.0066	0.0066	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	355	1,270	
6/28/2006		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	2.4	2.9	< 3 U	< 0.097 U	< 0.05 U	376	1,290	
4/3/2007		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	302	--	
9/13/2007		N	--	--	< 0.015 U	--	< 0.02 U	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	283	--	
3/27/2008		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0077	0.0077	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	287	1,230	
8/12/2008		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.008	0.008	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	273	1,260	
3/17/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	7.8	2.9	1.3	< 3 U	< 0.098 U	< 0.05 U	283	1,190	
8/21/2009		N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	732	--	
3/12/2010		N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.138	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	219	1,290	
8/9/2010		N	--	0.016	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.059	< 0.05 U	257	1,190	
5/15/2012		N	< 0.0100 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	245 J	1,150	
11/2/2012		N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.									

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW074SA	8/6/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	586	2,190
	3/16/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0067	0.0067	23	6.8	2.2	< 3 U	0.12	0.069	491	2,060
	8/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	634	2,020
	3/16/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.077	< 0.050 U	< 0.050 U	1.4	< 1 U	1.1	< 1 U	0.216	< 0.05 U	406	2,100
	8/16/2010	N	--	0.023	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	361	2,180
	5/16/2012	N	< 0.0100 U	--	0.0135	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	596 J	2,210
	10/31/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	584	1,790
	5/7/2013	N	0.0116 J	--	0.0149	--	--	0.00610 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	542	2,100
	10/31/2013	N	0.0128 J	--	0.0111	--	--	0.0113	< 0.200 U	--	0.053	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	500	2,070
	5/14/2014	N	0.0199 J	--	0.00988 J	--	--	< 0.0100 U	< 0.200 U	--	0.00841 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	596 J	2,150
	11/11/2014	N	0.00628 J	--	0.00908 J	--	--	0.0104	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	450	2,100
	5/13/2015	N	< 0.0200 U	--	0.00813 J	--	--	0.00890 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	449	1,980
	11/10/2015	N	0.0208	--	0.00733 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	377	1,860
	5/17/2016	N	0.0219	--	0.00505 J	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	273	1,670
	9/19/2016	N	< 0.00336 U	--	0.00861 J	--	< 0.01 U	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	339	1,670
	5/9/2017	N	0.0122	--	0.00866	--	0.0044 J	--	0.0776 J	--	0.0017 J	--	--	--	--	--	--	--	394	1,610
	9/20/2017	N	0.0131	--	0.00754	--	< 0.01 U	--	< 0.1 U	--	0.000218 J	--	--	--	--	--	--	--	382	1,700
	3/22/2018	Reg	--	0.0125	--	0.00601	--	< 0.0100 U	< 0.1	--	--	< 0.002	--	--	--	--	--	--	350	1,580
	9/12/2018	Reg	0.0152	--	0.00517	--	< 0.0100 U	--	--	< 0.100 U	0.000226 J	--	--	--	--	--	--	--	376	1,510
MW075SA	2/5/2004	N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	1.6	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	930	2,790
	6/10/2004	N	--	--	< 0.05 U	--	0.052	--	--	--	--	--	--	--	--	--	--	--	800	--
	12/7/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	--	--	--	--	--	--	930	--
	6/1/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	800	--
	1/19/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	795	2,780
	6/21/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	826	2,660
	4/3/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.224	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	641	--
	9/6/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	607	--
	3/20/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.0005 U	< 0.0005 U	< 1 U	< 1 U	1.3	< 3 U	< 0.096 U	< 0.05 U	660	--
	8/6/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	645	2,330
	3/16/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	15	4.9	1.8	< 3 U	< 0.095 U	< 0.05 U	598	2,400
	8/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	586	2,400
	3/16/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.101	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.051 U	< 0.05 U	354	2,450
	8/16/2010	N	--	0.024	--	< 0.050 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	< 0.050 U	< 0.05 U	375	2,270
	5/9/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	531	2,370
	10/30/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	535	2,260
	5/6/2013	N	0.0103 J	--	< 0.0100 UJ	--	--	< 0.0100 U	0.0227 J	--	< 0.0200 U	--	0.590 J	< 2.00 U	< 1.00 U	< 1.00 U	--	--	529	2,120
	10/30/2013	N	0.0125 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	405	2,120
	5/14/2014	N	0.0217	--	0.00211 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	444 J	2,090
	11/11/2014	N	0.0148 J	--	0.00369 J	--	--	< 0.0100 U	< 0.200 U	--	0.00954 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	400	2,050
	5/15/2015	N	0.0152 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	403	1,890
	11/10/2015	N	0.0209	--	0.00673 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	382	1,910
	5/17/2016	N	0.0164	--	0.00392 J	--	0.0062 J	--	--	--	--	--	--	--	--	--	--	--	316	1,580
	9/19/2016	N	< 0.00336 U	--	0.00847 J	--	0.0075 J	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	387	1,840
	5/8/2017	N	0.0125	--	0.0112	--	0.0084 J	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	397	1,820
	9/20/2017	N	0.0143	--	0.0135	--	0													

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	11/11/2014	N	0.0105 J	--	0.00312 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	365	2,110
	5/15/2015	N	0.0153 J	--	< 0.0100 U	--	--	0.00560 J	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	457	2,080
	11/11/2015	N	0.0238	--	0.00865 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	423	2450 J
	5/18/2016	N	0.0162	--	0.0139	--	0.0058 J	--	--	--	--	--	--	--	--	--	--	--	480	2,180
	9/19/2016	N	< 0.00336 U	--	0.0119	--	0.0071 J	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	508	2,320
	5/8/2017	N	0.0103	--	0.012	--	0.0092 J	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	580	2,170
	9/20/2017	N	0.0119	--	0.0146	--	0.0076 J	--	< 0.1 U	--	0.000882 J	--	--	--	--	--	--	--	623	2,060
	3/22/2018	Reg	--	0.0109	--	0.0128	--	0.00300 J	0.0973	--	--	0.00196	--	--	--	--	--	--	579	2,020
	9/11/2018	Reg	0.013	--	0.0137	--	0.00580 J	--	--	0.0231 J	0.000582 J	--	--	--	--	--	--	--	583	1,850
MW077SA	2/3/2004	N	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	4.6	< 0.05 U	0.12	< 2 U	< 2 U	< 2 U	< 6 U	0.46	< 0.05 U	880	1,700
	6/14/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	340	--
	12/8/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	52	71	39	250	< 0.25 U	< 0.05 U	390	--
	6/1/2005	N	--	--	0.03	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	2,080	--
	1/19/2006	N	--	< 0.02 U	--	0.03	--	0.028	--	< 0.2 U	0.0095	0.0095	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,760	4,470
	6/21/2006	N	--	< 0.02 U	--	0.0343	--	0.023	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.12	< 0.05 U	1,660	4,140
	6/21/2006	FD	--	< 0.02 U	--	0.0317	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.12	< 0.05 U	1,710	4,260
	4/11/2007	N	--	< 0.02 U	--	0.0301	--	0.028	--	< 0.2 U	0.0136	0.0136	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	1,900	--
	9/6/2007	N	--	< 0.02 U	--	0.0197	--	< 0.02 U	--	< 0.2 U	0.0136	0.0136	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	1,760	--
	4/8/2008	N	--	< 0.02 U	--	0.0233	--	0.029	--	< 0.2 U	0.0156	0.0156	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	1,680	3,940
	8/19/2008	N	--	< 0.02 U	--	0.0481	--	0.044	--	< 0.2 U	0.0054	0.0054	< 1 U	< 1 U	1.4	< 3 U	0.11	< 0.05 U	1,960	5,010
	3/25/2009	N	--	< 0.02 U	--	0.0294	--	0.022	--	< 0.2 U	0.0051	0.0051	< 1 U	< 1 U	< 1 U	< 3 U	0.097	< 0.05 U	1,170	3,100
	8/18/2009	N	--	< 0.02 U	--	0.0157	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	755	2,690
	3/4/2010	N	--	0.44	--	< 0.05 U	--	< 0.01 U	--	0.098	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.051	< 0.05 U	701	2,600
	8/5/2010	N	--	0.015	--	< 0.05 U	--	< 0.01 U	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.061	< 0.05 U	609	2,400
	5/9/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	536	1,740
	11/1/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	718	1,930
	5/6/2013	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	416	1,380
	3/24/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.3	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	0.94	< 0.05 U	220	1,100
	4/6/2004	N	--	< 0.01 U	--	< 0.05 U	--	--	--	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	--	--
	6/14/2004	N	--	--	< 0.05 U	--	< 0.005 U	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	220	--
12/8/2004	N	--	--	< 0.01 U	--	< 0.005 U	--	--	--	--	--	50	84	69	220	< 0.25 U	< 0.05 U	220	--	
6/1/2005	N	--	--	< 0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	170	--	
1/19/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	191	897	
6/21/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	201	936	
4/5/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	191	--	
9/6/2007	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	--	
9/7/2007	N	--	--	--	< 0.015 U	--	< 0.02 U	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	155	--	
3/26/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	191	823	
8/11/2008	N	--	< 0.02 U	--	0.005	--	< 0.02 U	--	< 0.2 U	0.005	0.005	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	158	855	
3/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0069	0.0069	3.2	1.3	< 1 U	< 3 U	< 0.096 U	< 0.05 U	172	845	
8/20/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	159	790	
3/11/2010	N	--	< 0.05 U	--	< 0.050 U	--	< 0.01 U	--	0.117	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.072	< 0.05 U	137	716	
8/10/2010	N	--	0.015	--	< 0.050 U	--	0.01	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.123	< 0.05 U	183	794	
5/16/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 UJ	< 2.00 UJ	< 1.00 UJ	< 1.00 UJ	--	--	184 J	845	
11/2/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U						

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW079SA	3/28/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	2.21	0.176	0.176	< 1 U	< 1 U	< 1 U	< 3 U	0.14	< 0.05 U	508	--
	9/7/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.257	0.178	0.178	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	418	--
	4/2/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	2.43	0.128	0.128	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	373	1,420
	8/6/2008	N	--	< 0.02 U	--	0.0195	--	< 0.02 U	--	< 0.2 U	0.153	0.153	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	340	1,320
	3/24/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.146	0.146	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	322	1,290
	8/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0893	0.0893	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	398	1,240
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.219	0.059	0.059	< 1 U	< 2 U	< 1 U	< 1 U	< 0.052 U	< 0.05 U	249	1,250
	8/4/2010	N	--	< 0.01 U	--	< 0.05 U	--	< 0.01 U	--	0.244	0.054	0.054	55	42	< 20 U	< 20 U	0.09	0.093	287	1,270
	5/9/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	0.0355	< 0.200 U	--	0.0671	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	327	1,310
	11/7/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	0.214	0.0585	0.0585	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	348	1,320
	11/1/2013	N	0.00919 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0225	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	338	1,360
	5/15/2014	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0353	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	329	1,440
	11/13/2014	N	0.0189 J	--	0.00100 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	365	1,430
	5/13/2015	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0132 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	344	1,410
	11/12/2015	N	0.00631 J	--	0.00165 J	--	--	< 0.0100 U	< 0.200 U	--	0.00935 J	--	--	--	--	--	--	--	325	1,280
	5/17/2016	N	0.00693 J	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	222	1,140
	9/20/2016	N	< 0.00336 U	--	0.00159 J	--	< 0.01 U	--	0.0119 J	--	0.0029 J	--	--	--	--	--	--	--	282	1,170
	5/8/2017	N	0.00324	--	< 0.004 U	--	< 0.01 U	--	0.428	--	0.0566	--	--	--	--	--	--	--	303	1,130
	9/20/2017	N	0.00748	--	0.00105 J	--	< 0.01 U	--	0.101	--	0.0251	--	--	--	--	--	--	--	308	1,220
	3/23/2018	Reg	--	0.00663	--	< 0.00400 U	--	< 0.0100 U	0.335	--	--	0.0531	--	--	--	--	--	--	278	635
	9/12/2018	Reg	0.00709	--	0.000775 J	--	< 0.0100 U	--	--	0.176	0.0406	--	--	--	--	--	--	--	270	1,140
	9/12/2018	FD	0.00707	--	0.000783 J	--	< 0.0100 U	--	--	0.184	0.042	--	--	--	--	--	--	--	269	1,030
MW080SA	3/17/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	0.029	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	0.28	< 0.05 U	660	1,850
	6/3/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	0.028	--	< 0.1 U	1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	800	--
	7/7/2004	N	--	0.038	0.025	0.022	< 0.02 U	--	22	21	12	9.8	--	--	--	--	--	--	1,400	--
	8/17/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	0.023	--	1.5	1.5	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	--
	10/11/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	720	--
	11/23/2004	N	--	< 0.01 U	0.03	0.03	0.019	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	980	2,390
	1/5/2005	N	--	< 0.01 U	0.03	0.03	0.019	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	760	2,100
	1/27/2005	N	--	< 0.01 U	0.02	0.02	0.007	--	< 0.4 U	< 0.4 U	< 0.01 U	0.01	--	--	--	--	--	--	680	2,370
	2/16/2005	N	--	< 0.01 U	0.02	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	0.01	0.01	--	--	--	--	--	--	830	2,360
	3/16/2005	N	--	< 0.01 U	0.02	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	0.01	0.02	--	--	--	--	--	--	710	2,110
	4/18/2005	N	--	< 0.01 U	0.02	0.03	0.014	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	700	1,800
	6/2/2005	N	--	< 0.01 U	0.02	0.02	0.016	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	720	2,330
	6/20/2005	N	--	< 0.01 U	0.01	0.02	< 0.005 U	--	1.66	1.1	0.06	0.03	--	--	--	--	--	--	730	2,350
	6/20/2005	FD	--	0.01	0.01	0.01	< 0.005 U	--	1.6	1.59	0.07	0.07	--	--	--	--	--	--	750	2,360
	7/20/2005	N	--	< 0.01 U	0.02	0.02	< 0.005 U	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	700	2,200
	2/2/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0275	0.0275	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	615	1,850
	7/18/2006	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0135	0.0135	< 1 U	< 1 U	< 1 U	< 3 U	0.13	< 0.05 U	504	1,800
	3/28/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0168	0.0168	< 1 U	< 1 U	< 1 U	< 3 U	0.26	0.059	403	--
	9/7/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0134	0.0134	< 1 U	< 1 U	< 1 U	< 3 U	0.13	< 0.05 U	344	--
	4/2/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0214	0.0214	< 1 U	< 1 U	< 1 U	< 3 U	0.25	0.071	332	1,370
	8/6/2008	N	--	< 0.02 U	--	0.0195	--	< 0.02 U	--	< 0.2 U	0.0246	0.0246	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	305	1,220
	3/23/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	280	1,250
8/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	735	1,160	
3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.048	< 0.050 U	< 0.050 U	<								

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	4/2/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	4.56	0.0919	0.0919	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	483	1,640	
	8/6/2008	N	--	< 0.02 U	--	0.0195	--	< 0.02 U	--	1.76	0.0916	0.0916	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	439	1,520	
	3/23/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.297	0.0821	0.0821	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	510	1,940	
	8/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	0.0742	0.0742	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	1,340	1,640	
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.095	0.055	0.055	< 1 U	< 2 U	< 1 U	< 1 U	0.101	< 0.05 U	485	1,760	
	8/4/2010	N	--	0.011	--	< 0.05 U	--	< 0.01 U	--	3.61	0.063	0.063	< 1 U	< 2 U	< 1 U	< 1 U	0.069	< 0.05 U	515	1,710	
	5/9/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0281	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	457	1,920	
MW081SA	11/7/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	0.0712	0.0712	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	565	1,490	
	5/8/2013	N	< 0.0200 UJ	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.233	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	567	2,000	
	3/25/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	0.006	--	0.2	3.3	< 0.05 U	0.09	< 2 U	< 2 U	< 2 U	< 6 U	< 0.26 U	< 0.05 U	1,200	3,420	
	6/8/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.1 U	--	9	13	5.74	9.12	--	--	--	--	--	--	1,300	--	
	7/21/2004	N	--	< 0.01 U	0.08	0.12	< 0.1 U	--	37.8	51	22.7	30.5	--	--	--	--	--	--	1,600	--	
	8/23/2004	N	--	< 0.1 U	0.2	0.2	< 0.1 U	--	97.4	154	24.6	27.8	--	--	--	--	--	--	1,950	--	
	10/19/2004	N	--	< 0.1 U	1.6	1.8	< 0.005 U	--	1250	1600	54.4	94.4	--	--	--	--	--	--	1,280	--	
	12/8/2004	N	--	< 0.01 U	0.2	4	< 0.005 U	--	1800	184	< 0.01 U	< 0.1 U	--	--	--	--	--	--	1,340	8,360	
	1/12/2005	N	--	< 0.01 U	0.07	0.07	< 0.02 U	--	16.3	15.7	1.66	< 0.01 U	--	--	--	--	--	--	1,310	4,880	
	2/2/2005	N	--	< 0.1 U	2	3.3	< 0.05 U	--	187	327	13.8	21	--	--	--	--	--	--	1,230	8,270	
	3/1/2005	N	--	< 0.1 U	0.1	0.2	< 0.1 U	--	151	305	4	9.9	--	--	--	--	--	--	1,170	7,310	
	3/24/2005	N	--	< 0.1 U	0.2	0.2	< 0.005 U	--	215	220	3.4	3.5	--	--	--	--	--	--	900	7,290	
	4/27/2005	N	--	< 0.01 U	0.13	0.17	< 0.05 U	--	< 0.4 U	< 0.4 U	2.75	3.54	--	--	--	--	--	--	980	7,340	
	5/25/2005	N	--	< 0.01 U	0.01	0.02	< 0.01 U	--	15.8	38.7	0.29	0.66	--	--	--	--	--	--	1,000	6,950	
	6/28/2005	N	--	< 0.05 U	0.09	0.11	< 0.05 U	--	51.3	66.2	3.15	3.67	--	--	--	--	--	--	990	6,880	
	7/14/2005	N	--	< 0.01 U	0.09	0.09	< 0.05 U	--	< 0.4 U	< 0.4 U	2.93	2.89	--	--	--	--	--	--	910	7,970	
	2/3/2006	N	--	0.0809	--	0.0364	--	< 0.02 U	--	2.2	1.06	1.06	< 10 U	< 10 U	< 10 U	< 30 U	< 6 U	< 6 U	940	3,440	
	7/14/2006	N	--	0.0226	--	< 0.015 U	--	< 0.02 U	--	< 0.2 U	1.15	1.15	< 1 U	< 1 U	< 1 U	< 3 U	0.48	< 0.05 U	1,210	3,620	
	3/22/2007	N	--	< 0.02 U	--	< 0.0151 U	--	< 0.02 U	--	0.62	1.55	1.55	1.5	< 1 U	< 1 U	< 3 U	0.37	< 0.05 U	1,120	--	
	9/6/2007	N	--	< 0.02 U	--	< 0.015 U	--	< 0.2 U	--	1.97	1.9	1.9	< 1 U	< 1 U	< 1 U	< 3 U	0.45	< 0.05 U	1,120	--	
	3/26/2008	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	4.16	2.07	2.07	< 5 U	< 5 U	< 5 U	< 15 U	0.42	0.27	1,200	3,240	
	8/6/2008	N	--	< 0.02 U	--	0.0195	--	< 0.02 U	--	1.66	2.1	2.1	< 1 U	< 1 U	< 1 U	< 3 U	0.28	< 0.05 U	1,180	3,210	
	3/18/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	4.56	2.61	2.61	< 1 U	< 1 U	< 1 U	< 3 U	0.3	0.073	1,380	3,480	
	8/17/2009	N	--	< 0.02 U	--	< 0.015 U	--	< 0.02 U	--	0.565	3.15	3.15	< 1 U	< 1 U	< 1 U	< 3 U	0.25	< 0.05 U	366	4,070	
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.651	1.11	1.11	< 1 U	< 2 U	< 1 U	< 1 U	0.28	< 0.05 U	968	3,080	
	8/4/2010	N	--	< 0.01 U	--	< 0.05 U	--	< 0.01 U	--	6.45	3.52	3.52	< 1 U	< 2 U	< 1 U	< 1 U	0.329	< 0.05 U	1,600	3,940	
	5/11/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	0.062	0.576	--	0.139	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	758 J	2,690	
	10/30/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	0.164	0.164	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	880	2,930	
	5/6/2013	N	< 0.0200 U	--	< 0.0100 UJ	--	--	< 0.0100 U	0.0499 J	--	0.404	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,370	3,940	
		3/25/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	0.008	--	0.2	4.6	< 0.05 U	0.1	< 2 U	< 2 U	< 2 U	< 6 U	< 0.27 U	< 0.05 U	1,400	3,740
		6/8/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.1 U	--	15.7	17	5.1	5.47	--	--	--	--	--	--	1,120	--
		7/22/2004	N	--	< 0.1 U	< 0.5 U	< 0.5 U	< 0.1 U	--	3.2	40	26.1	31.6	--	--	--	--	--	--	830	--
		8/23/2004	N	--	< 0.1 U	0.2	0.2	0.2	--	77.3	299	37.8	37.6	--	--	--	--	--	--	1,940	--
10/19/2004		N	--	< 0.1 U	1.4	3.3	< 0.005 U	--	1260	2970	105	255	--	--	--	--	--	--	1,560	--	
12/8/2004		N	--	< 0.01 U	0.2	3.7	< 0.005 U	--	26.3	235	< 0.01 U	176	--	--	--	--	--	--	1,640	8,840	
1/13/2005		N	--	< 0.01 U	0.04	0.04	< 0.005 U	--	25.5	26.2	1.89	1.98	--	--	--	--	--	--	1,420	5,090	
2/2/2005		N	--	< 0.1 U	1.7	2.1	< 0.05 U	--	429	398	18.6	17.1	--	--	--	--	--	--	1,610	9,800	
3/1/2005		N	--	< 0.1 U	0.1	0.2	< 0.1 U	--	192	198	10.5	17.6	--	--	--	--	--	--	1,720	12,200	
3/24/2005		N	--	1.3	0.1	0.1	< 0.005 U	--	132	132	5.9	6.2	--	--	--	--	--	--	1,140	7,090	
4/27/2005		N	--	< 0.01 U	0.2	0.22	< 0.1 U	--	< 0.4 U	< 0.4 U	3.68										

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	11/10/2015	N	0.0135 J	--	0.00339 J	--	--	< 0.0100 U	< 0.200 U	--	0.215	--	--	--	--	--	--	--	709	2,200	
	5/17/2016	N	0.017	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	1,060	4,880	
	9/19/2016	N	< 0.00336 U	--	0.0107	--	< 0.01 U	--	0.136 J	--	0.193	--	--	--	--	--	--	--	1,240	3,850	
	5/8/2017	N	0.0115	--	0.00703	--	< 0.01 U	--	0.867	--	0.0785	--	--	--	--	--	--	--	1,510	3,780	
MW084SA	3/24/2004	N	--	< 0.01 U	0.08	0.08	0.069	--	< 0.1 U	3.8	< 0.05 U	0.1	< 2 U	< 2 U	< 2 U	< 6 U	< 0.29 U	< 0.05 U	1,800	4,380	
	6/7/2004	N	--	< 0.01 U	0.09	0.1	0.18	--	< 0.1 U	1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,100	--	
	7/22/2004	N	--	< 0.01 U	0.1	0.11	0.063	--	1.2	2.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	2,800	--	
	8/24/2004	N	--	< 0.01 U	0.09	0.1	0.092	--	< 0.25 U	3.43	< 0.01 U	0.07	--	--	--	--	--	--	2,500	--	
	10/20/2004	N	--	< 0.01 U	0.1	0.1	0.079	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,990	--	
	12/9/2004	N	--	< 0.01 U	0.1	0.1	0.08	--	< 4 U	< 0.4 U	< 0.01 U	0.01	--	--	--	--	--	--	2,490	6,020	
	1/13/2005	N	--	< 0.01 U	0.09	0.1	0.093	--	< 0.4 U	1.61	< 0.01 U	0.02	--	--	--	--	--	--	2,320	5,160	
	2/3/2005	N	--	< 0.01 U	0.09	0.09	0.09	--	0.78	< 0.4 U	0.02	0.02	--	--	--	--	--	--	1,800	--	
	3/2/2005	N	--	< 0.01 U	0.09	0.17	0.06	--	< 0.4 U	0.58	< 0.01 U	0.01	--	--	--	--	--	--	1,890	4,510	
	3/24/2005	N	--	< 0.01 U	0.1	0.1	0.08	--	< 0.4 U	2.26	< 0.01 U	0.04	--	--	--	--	--	--	2,000	4,670	
	4/27/2005	N	--	< 0.01 U	0.11	0.11	0.12	--	< 0.4 U	0.6	< 0.01 U	< 0.01 U	--	--	--	--	--	--	2,330	5,520	
	5/24/2005	N	--	< 0.01 U	0.1	0.1	0.11	--	< 0.4 U	0.59	< 0.01 U	0.01	--	--	--	--	--	--	1,860	4,510	
	6/28/2005	N	--	< 0.01 U	0.09	0.09	0.24	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	2,220	5,090	
	7/18/2005	N	--	< 0.01 U	0.1	0.11	0.14	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	2,070	4,870	
	7/19/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/3/2006	N	--	< 0.02 U	--	0.151	--	0.16	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	2,500	5,600	
	7/14/2006	N	--	< 0.02 U	--	0.129	--	0.13	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.14	< 0.05 U	1,720	4,140	
	3/21/2007	N	--	< 0.02 U	--	0.187	--	0.15	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.12	< 0.05 U	2,090	--	
	9/6/2007	N	--	< 0.02 U	--	0.192	--	0.18	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.13	< 0.05 U	2,290	--	
	3/25/2008	N	--	< 0.02 U	--	0.192	--	0.2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.15	< 0.05 U	2,720	4,860	
	8/5/2008	N	--	< 0.02 U	--	0.18	--	0.17	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.3	< 0.05 U	2,430	5,720	
	3/17/2009	N	--	< 0.02 U	--	0.176	--	0.17	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.15	< 0.05 U	2,530	5,310	
	8/13/2009	N	--	0.0229	--	0.0982	--	0.11	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.21	< 0.05 U	1,980	4,760	
	3/2/2010	N	--	< 0.05 U	--	0.14	--	0.157	--	0.133	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.178	< 0.05 U	2,350	6,280	
	8/3/2010	N	--	0.02	--	0.102	--	0.127	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.25	< 0.05 U	2,140	5,550	
	5/11/2012	N	< 0.0100 U	--	0.0405	--	--	0.0397	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1180 J	3,540	
	10/30/2012	N	--	< 0.0100 U	--	0.0388	--	0.0377	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,190	3,350	
	5/6/2013	N	0.0101 J	--	0.036	--	--	0.0294	0.0294 J	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,010	3,150	
	10/30/2013	N	0.0164 J	--	0.0291	--	--	0.0239	< 0.200 U	--	0.0533	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,060	3,030	
	5/14/2014	N	0.0164 J	--	0.0241	--	--	0.0186	< 0.200 U	--	0.00379 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1070 J	3,070	
	11/11/2014	N	< 0.0200 U	--	0.024	--	--	0.0218	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	975	3,100	
	5/15/2015	N	0.0179 J	--	0.0228	--	--	0.0269	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,050	2,980	
	11/10/2015	N	0.0227	--	0.0278	--	--	0.0216	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	--	1,020	2,960
	5/17/2016	N	0.0144	--	0.0255	--	0.0333	--	--	--	--	--	--	--	--	--	--	--	--	1,910	6,790
	9/19/2016	N	< 0.00336 U	--	0.0212	--	0.0103	--	0.0067 J	--	0.0163 J	--	--	--	--	--	--	--	--	1,560	4,200
	5/8/2017	N	0.0108	--	0.0328	--	0.0313	--	0.0341	--	< 0.002 U	--	--	--	--	--	--	--	--	1,210	2,980
	9/20/2017	N	0.0098	--	0.0165	--	0.0112	--	< 0.1 U	--	0.00181 J	--	--	--	--	--	--	--	--	1,610	3,970
	3/22/2018	Reg	--	0.00734	--	0.0126	--	--	< 0.0100 U	0.324	--	--	0.0115	--	--	--	--	--	--	1,400	3,890
	9/11/2018	Reg	0.00938	--	0.0168	--	0.00860 J	--	--	< 0.100 U	0.0029	--	--	--	--	--	--	--	--	1,370	3,060
MW085SA	3/25/2004	N	--	< 0.01 U	0.21	0.16	0.09	--	0.2	2.8	< 0.05 U	< 0.05 U	< 2 U	< 2 U	< 2 U	< 6 U	< 0.26 U	< 0.05 U	1,180	3,600	
	6/7/2004	N	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.005 U	--	< 0.25 U	< 0.25 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,660	--	
	6/8/2004	N	--	--	0.06	--	--	--	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	
	7/22/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	0.005	--	< 0.1 U	0.5	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,700	--	
	8/23/2004	N	--	< 0.01 U	0.01	0.01	0.008														

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	3/3/2010	N	--	< 0.05 U	--	< 0.05 U	--	< 0.01 U	--	0.28	0.184	0.184	< 1 U	< 2 U	< 1 U	< 1 U	0.217	< 0.05 U	921	3,220	
	8/4/2010	N	--	0.036	--	< 0.05 U	--	< 0.01 U	--	0.137	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.479	< 0.05 U	1,460	3,690	
	5/11/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	0.0895	0.98	--	0.737	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	646 J	2,400	
	10/31/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	0.92	0.668	0.668	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	713	2,760	
	5/6/2013	N	< 0.0200 U	--	< 0.0100 UJ	--	--	< 0.0100 U	< 0.200 U	--	0.476	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	594	2,560	
	10/31/2013	N	0.00961 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.707	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	661	2,770	
	5/14/2014	N	0.0138 J	--	0.00238 J	--	--	< 0.0100 U	0.0537 J	--	0.388	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	812 J	2,880	
	11/11/2014	N	0.0127 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.499	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	596	2,670	
	5/15/2015	N	0.0124 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.44	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	688	2,530	
	5/15/2015	FD	0.00888 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.456	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	690	2,630	
	11/10/2015	N	0.0232	--	0.00401 J	--	--	< 0.0100 U	< 0.200 U	--	0.375	--	--	--	--	--	--	--	619	2,060	
	5/17/2016	N	0.0182	--	0.0101	--	0.0124	--	--	--	--	--	--	--	--	--	--	--	1,300	4,000	
	5/17/2016	FD	0.0206	--	0.0124	--	0.0123	--	--	--	--	--	--	--	--	--	--	--	1,340	4,230	
	9/19/2016	N	< 0.00336 U	--	0.0269	--	0.0123	--	0.0189 J	--	0.0233	--	--	--	--	--	--	--	1,380	3,930	
	5/8/2017	N	0.0111	--	0.0254	--	0.0244	--	< 0.02 U	--	0.00864	--	--	--	--	--	--	--	1,430	3,850	
	9/20/2017	N	0.0124	--	0.0293	--	0.0182	--	< 0.1 U	--	0.0241	--	--	--	--	--	--	--	1,410	4,160	
	3/22/2018	Reg	--	0.0142	--	0.0336	--	0.0126	0.0345	--	--	0.0332	--	--	--	--	--	--	1,470	4,090	
	9/11/2018	Reg	0.014	--	0.0258	--	0.00280 J	--	--	0.177	0.115	--	--	--	--	--	--	--	1,650	3,270	
MW086SA	9/14/2004	N	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.005 U	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	2,290	--	
	10/7/2004	N	--	--	--	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 6 U	< 0.25 U	< 0.05 U	--	--	
	1/13/2005	N	--	< 0.01 U	0.02	0.02	0.017	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	2,120	5,050	
	1/13/2005	FD	--	< 0.01 U	0.01	0.02	0.01	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	2,300	4,850	
	6/2/2005	N	--	< 0.01 U	0.01	0.01	0.022	--	< 0.4 U	< 0.4 U	< 0.01 U	< 0.01 U	--	--	--	--	--	--	1,780	4,370	
	1/27/2006	N	--	< 0.02 U	--	0.058	--	0.052	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	1,170	2,680	
	7/12/2006	N	--	< 0.02 U	--	0.115	--	0.13	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.094 U	< 0.05 U	1,300	2,460	
	4/11/2007	N	--	< 0.02 U	--	0.0787	--	0.075	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	1,220	--	
	9/21/2007	N	--	< 0.02 U	--	0.121	--	0.12	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	3.2	8.9	< 3 U	< 0.095 U	< 0.05 U	1,010	--	
	4/8/2008	N	--	< 0.02 U	--	0.0578	--	0.057	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	1,090	2,640	
	8/19/2008	N	--	< 0.02 U	--	0.0762	--	0.078	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	1.1	< 3 U	< 0.1 U	< 0.05 U	1,250	2,900	
	3/25/2009	N	--	< 0.02 U	--	0.0512	--	0.047	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	1,390	3,650	
	8/10/2009	N	--	< 0.02 U	--	0.0601	--	0.063	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 1 U	0.12	< 0.05 U	1,330	4,120	
	3/4/2010	N	--	< 0.05 U	--	0.055	--	0.074	--	0.314	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.105	< 0.05 U	1,490	3,780	
	8/5/2010	N	--	0.016	--	< 0.05 U	--	0.048	--	< 0.1 U	< 0.050 U	< 0.050 U	< 1 U	< 2 U	< 1 U	< 1 U	0.154	< 0.05 U	1,430	3,860	
	5/8/2012	N	0.0167	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	679	2,010	
	11/1/2012	N	--	< 0.0100 U	--	< 0.0100 U	--	< 0.0100 U	--	< 0.200 U	0.0398	0.0398	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	831	2,130	
	5/7/2013	N	0.00795 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.00506 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	851	1,970	
	10/30/2013	N	0.0199 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0895	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	656	2,190	
	5/14/2014	N	0.0137 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.00416 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	605 J	2,090	
	11/12/2014	N	0.0178 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.00433 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	514	1,660	
	5/14/2015	N	0.00954 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	531	1,550	
	11/11/2015	N	0.0152 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	765	2200 J	
	5/18/2016	N	0.0216	--	0.0416	--	0.0432	--	--	--	--	--	--	--	--	--	--	--	--	1,040	2,540
	9/19/2016	N	< 0.00336 U	--	0.055	--	0.049	--	< 0.00616 U	--	< 0.000585 U	--	--	--	--	--	--	--	--	1,160	3,600
	5/9/2017	N	0.0103	--	0.0549	--	0.0084 J	--	0.241 J	--	0.00381	--	--	--	--	--	--	--	--	1,470	3,800
	9/20/2017	N	0.0111	--	0.0475	--	0.0464	--	0.515	--	0.0101	--	--	--	--	--	--	--	--	1,370	3,420
	3/22/2018	Reg	--	0.00957	--	0.039	--	0.0341	0.266												

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS	
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000	
Location ID	Sample Date	Sample Type																			
	6/3/2015	N	0.0143 J	--	0.0326	--	--	< 0.0500 U	< 0.200 UJ	--	0.135	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,230	4,110	
	5/20/2016	N	0.00396 J	--	0.0374	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	1,010	3,530	
	5/4/2017	N	0.00338	--	0.0478	--	< 0.01 U	--	1.12	--	0.548	--	--	--	--	--	--	--	1,210	3,550	
	4/4/2018	Reg	--	0.00115 J	--	0.0265	--	< 0.0100 U	1.18	--	--	0.281	--	--	--	--	--	--	1,270	4,040	
MW088M	9/13/2004	N	--	--	--	--	--	--	--	--	--	--	< 40 U	< 40 U	< 40 U	< 100 U	39	7	--	--	
	9/18/2004	N	--	< 0.01 U	0.37	0.53	< 0.05 U	--	216	259	< 0.05 U	< 0.05 U	--	--	--	--	--	--	670	--	
	10/7/2004	N	--	< 0.1 U	1.2	1.1	< 0.1 U	--	585	584	72.8	73.4	--	--	--	--	--	--	1,180	--	
	11/10/2004	N	--	< 0.1 U	0.05	1	< 1 U	--	--	666	2.71	64.7	--	--	--	--	--	--	1,080	15,900	
	12/28/2004	N	--	< 0.1 U	0.8	0.9	< 0.01 U	--	724	695	63.8	62.4	--	--	--	--	--	--	1,220	12,000	
	1/19/2005	N	--	< 0.01 U	7.6	0.76	< 0.05 U	--	900	942	< 0.1 U	< 0.01 U	--	--	--	--	--	--	1,440	21,400	
	2/10/2005	N	--	< 0.1 U	0.7	1	< 0.05 U	--	747	856	53.2	62.3	--	--	--	--	--	--	1,300	19,900	
	3/10/2005	N	--	< 0.1 U	0.6	0.9	< 0.005 U	--	482	681	34.5	47.5	--	--	--	--	--	--	930	15,400	
	4/13/2005	N	--	< 0.1 U	0.5	0.7	< 0.05 U	--	464	742	33.6	49.5	--	--	--	--	--	--	930	16,000	
	5/17/2005	N	--	< 0.1 U	1.2	4	< 0.05 U	--	497	626	31.9	38.2	--	--	--	--	--	--	1,230	41,500	
	5/31/2005	N	--	< 0.01 U	0.52	0.6	< 0.1 U	--	36.7	44.2	4.82	5.07	--	--	--	--	--	--	670	4,010	
	7/12/2005	N	--	< 0.05 U	0.68	0.7	< 0.05 U	--	< 2 U	< 2 U	45	43.2	--	--	--	--	--	--	1,140	23,700	
	2/6/2006	N	--	0.144	--	0.691	--	< 2 U	--	1330	36	36	< 100 U	< 100 U	< 100 U	< 300 U	< 1200 U	< 4000 U	626	24,900	
	7/20/2006	N	--	< 0.02 U	--	0.108	--	< 0.02 U	--	0.405	2.12	2.12	< 1 U	< 1 U	< 1 U	< 3 U	< 4.8 U	< 0.05 U	879	3,980	
	4/5/2007	N	--	< 0.02 U	--	0.0346	--	< 0.02 U	--	2.44	0.0385	0.0385	< 5 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	701	--	
	4/21/2008	N	--	0.154	--	0.273	--	< 2.0 U	--	1420	58.7	58.7	< 20 U	< 20 U	< 20 U	< 60 U	71	4.7	801	21,000	
	4/1/2009	N	--	0.117	--	0.186	--	< 2 U	--	1030	52.7	52.7	< 50 U	< 50 U	< 50 U	< 150 U	1500	4.9	720	17,100	
	3/11/2010	N	--	< 0.5 U	--	< 0.500 U	--	0.124	--	261	50	50	< 5 U	< 5 U	< 5 U	< 5 U	69.6	0.949	509	11,000	
	5/22/2012	N	0.158	--	0.122	--	--	0.117	14.1	--	15.6	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	918	8,290	
	5/21/2013	N	0.0825	--	0.143	--	--	< 0.200 U	32.3	--	13.2	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	809	7,040	
	5/9/2014	N	0.0354	--	0.126	--	--	< 0.0500 U	9.15	--	9.81	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	826	6,000	
	5/22/2015	N	0.0424	--	0.15	--	--	< 0.200 U	9.08	--	4.17	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	962	4,770	
	5/13/2016	N	0.0324	--	0.176	--	< 0.0548 U	--	--	--	--	--	--	--	--	--	--	--	923	2,790	
	5/5/2017	N	0.0235	--	0.165	--	< 0.01 U	--	0.688	--	0.798	--	--	--	--	--	--	--	942	3,300	
	9/22/2017	N	0.0304	--	0.194	--	< 0.01 U	--	7.5	--	0.931	--	--	--	--	--	--	--	820	3,100	
	4/4/2018	Reg	--	0.0286	--	0.164	--	< 0.0100 U	7.59	--	--	0.788	--	--	--	--	--	--	876	3,290	
	9/13/2018	Reg	0.0234	--	0.157	--	< 0.0100 U	--	--	1.99	0.994	--	--	--	--	--	--	--	1,760	3,200	
MW089SA	2/9/2006	N	--	< 0.02 U	--	1.36	--	0.95	--	0.284	0.0131	0.0131	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	709	2,810	
	2/9/2006	FD	--	< 0.02 U	--	1.19	--	0.96	--	0.213	0.0104	0.0104	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	744	2,880	
	7/21/2006	N	--	< 0.02 U	--	1.11	--	1.1	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	787	3,220	
	7/21/2006	FD	--	< 0.02 U	--	1.09	--	1.1	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	800	3,200	
	4/4/2007	N	--	< 0.02 U	--	0.591	--	1	--	< 0.2 U	0.0056	0.0056	< 1 U	< 1 U	< 1 U	< 3 U	< 0.097 U	< 0.05 U	785	--	
	4/9/2008	N	--	< 0.02 U	--	1.15	--	1.1	--	< 0.2 U	0.0118	0.0118	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	909	3,850	
	3/26/2009	N	--	< 0.02 U	--	1.07	--	1.1	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.10 U	< 0.05 U	1,010	3,790	
	3/8/2010	N	--	< 0.05 U	--	1.24	--	1.24	--	< 0.03 U	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.056 U	< 0.05 U	714	3,780	
	5/22/2012	N	< 0.0100 U	--	0.0226	--	--	0.0195	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	119	1,060	
	5/22/2012	FD	< 0.0100 U	--	0.022	--	--	0.0177	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	122	1,010	
	9/6/2012	N	--	--	--	0.0279	--	0.027	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--	--
	5/15/2013	N	< 0.0200 U	--	0.0381	--	--	0.0299	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	102	831	
	10/24/2013	N	--	--	--	1.17	--	1.16 J	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--	--
	5/27/2014	N	< 0.0200 U	--	0.0261	--	--	0.022	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	170	1,150	
	5/27/2014	FD	< 0.0200 U	--	0.0261	--	--	0.0216	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	169	1,150	
	6/1/2015	N	< 0.0200 U	--	0.0238	--	--	0.0186	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	172	1,170	
	5/19/2016	N	0.0152	--	1.34	--	1.14	--	--	--	--	--	--	--	--	--	--				

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
MW091SA	7/24/2006	N	--	< 0.02 U	--	0.856	--	0.77	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.095 U	< 0.05 U	732	2,920
	4/5/2007	N	--	< 0.02 U	--	1.05	--	1.1	--	< 0.2 U	0.0075	0.0075	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	864	--
	4/7/2008	N	--	< 0.02 U	--	1.16	--	0.57 *	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	819	2,970
	3/24/2009	N	--	< 0.02 U	--	0.821	--	0.88	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	834	3,540
	3/8/2010	N	--	< 0.05 U	--	0.912	--	0.851	--	< 0.03 U	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.054 U	< 0.05 U	672	3,360
	5/8/2012	N	< 0.0100 U	--	0.0567	--	--	0.051	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	187	1,200
	5/21/2014	N	< 0.0200 U	--	0.12	--	--	0.124	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	422	1,780
	5/7/2015	N	0.0115 J	--	0.14	--	--	0.141	< 0.200 U	--	0.00334 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	416	1,950
	5/19/2016	N	0.0268	--	0.876	--	0.87	--	--	--	--	--	--	--	--	--	--	--	701	3,300
	5/19/2016	FD	0.02	--	0.782	--	0.562	--	--	--	--	--	--	--	--	--	--	--	730	3,490
5/5/2017	N	0.00905	--	0.786	--	0.687	--	< 0.02 U	--	< 0.002 U	--	--	--	--	--	--	--	780	3,340	
MW092SA	2/9/2006	N	--	< 0.02 U	--	1.16	--	1	--	0.536	0.0102	0.0102	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	662	2,910
	7/24/2006	N	--	< 0.02 U	--	0.901	--	0.76	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.096 U	< 0.05 U	607	2,660
	4/5/2007	N	--	< 0.02 U	--	1.3	--	1.4	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	841	--
	4/8/2008	N	--	< 0.02 U	--	--	--	--	--	0.282	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	2,860
	4/9/2008	N	--	--	--	1.61	--	1.3	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	740	--
	3/24/2009	N	--	< 0.02 U	--	1.46	--	1.5	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	905	3,480
	3/8/2010	N	--	< 0.05 U	--	1.48	--	1.46	--	0.041	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.054 U	< 0.05 U	751	3,570
	5/11/2012	N	< 0.0100 U	--	0.0129	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	184 J	1,160
2/9/2006	N	--	< 0.02 U	--	0.689	--	0.62	--	1.66	0.0457	0.0457	< 1 U	< 1 U	< 1 U	< 3 U	< 0.6 U	< 0.6 U	684	2,820	
7/24/2006	N	--	< 0.02 U	--	0.477	--	0.42	--	< 0.2 U	0.0053	0.0053	< 1 U	< 1 U	< 1 U	< 3 U	0.11	< 0.05 U	564	2,580	
MW093SA	4/5/2007	N	--	< 0.02 U	--	0.615	--	0.97	--	0.883	0.0731	0.0731	< 1 U	< 1 U	< 1 U	< 3 U	0.34	< 0.05 U	732	--
	4/8/2008	N	--	< 0.02 U	--	--	--	--	--	< 0.2 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--	3,000
	4/9/2008	N	--	--	--	1.96	--	1.7	--	--	--	--	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	831	--
	3/24/2009	N	--	< 0.02 U	--	2	--	2	--	< 0.2 U	< 0.005 U	< 0.005 U	< 1 U	< 1 U	< 1 U	< 3 U	< 0.11 U	< 0.05 U	949	3,750
	3/8/2010	N	--	< 0.05 U	--	2.37	--	2.42	--	0.052	< 0.050 U	< 0.050 U	< 1 U	< 1 U	< 1 U	< 1 U	0.143	< 0.05 U	877	3,960
	5/11/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	244 J	1,050
	5/10/2013	N	< 0.0200 U	--	0.21	--	--	0.251	0.0278 J	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	656	2,800
	5/10/2013	FD	< 0.0200 U	--	0.286	--	--	0.306	0.0204 J	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	696	2,900
	5/21/2014	N	< 0.0200 U	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0102 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	485	1,360
	5/7/2015	N	0.0135 J	--	0.00499 J	--	--	< 0.0100 U	< 0.200 U	--	0.0345	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	510	2,220
	5/19/2016	N	0.0268	--	0.71	--	0.723	--	--	--	--	--	--	--	--	--	--	--	796	3,660
	9/22/2017	N	0.00906	--	0.645	--	0.702	--	< 1 U	--	0.0478	--	--	--	--	--	--	--	857	3,880
	3/29/2018	Reg	--	0.00826	--	0.523	--	0.557	< 0.1	--	--	0.142	--	--	--	--	--	--	982	3,000
	9/14/2018	Reg	0.00859	--	0.494	--	0.504	--	--	< 0.100 U	0.019	--	--	--	--	--	--	--	914	3,440
MW094	5/25/2012	N	< 0.0100 U	--	0.0585	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	147	1,170
	10/31/2012	N	--	< 0.0100 U	--	--	< 0.0100 U	--	< 0.200 U	< 0.0200 U	< 0.0200 U	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	161	1,350
	5/15/2013	N	0.00923 J	--	0.402	--	--	0.385	< 0.200 U	--	0.0143 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	297	2,400
	5/15/2013	FD	< 0.0200 U	--	0.399	--	--	0.395	< 0.200 U	--	0.0125 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	299	2,280
	11/1/2013	N	0.00855 J	--	0.138	--	--	0.127	< 0.200 U	--	0.0211	--	1.4	< 2.00 U	< 1.00 U	< 1.00 U	--	--	226	2,030
	5/9/2014	N	0.0141 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	138	1,110
	11/5/2014	N	0.0219	--	0.00213 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	126	980
	5/20/2015	N	0.0188 J	--	0.738	--	--	0.746	< 0.200 UJ	--	0.00830 J	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	409	2,630
	11/5/2015	N	< 0.0200 UJ	--	0.00375 J	--	--	< 0.0100 U	< 0.200 U	--	< 0.0200 U	--	--	--	--	--	--	--	158	1,070
	5/13/2016	N	0.0755	--	1.81	--	1.8	--	--	--	--	--	--	--	--	--	--	--	1,130	4,030
	9/21/2016	N	< 0.00336 U	--	1.75	--	2.36	--	< 0.00616 U	--	0.0524	--	--	--	--	--</				

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	5/7/2014	N	0.0126 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.104	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	197	897
	5/28/2015	N	0.00874 J	--	< 0.0100 U	--	--	< 0.0100 U	< 0.200 U	--	0.0865	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	227	974
	5/19/2016	N	0.0117	--	0.118	--	0.119	--	--	--	--	--	--	--	--	--	--	--	242	1,200
	5/4/2017	N	0.0116	--	0.0615	--	0.0162	--	0.119	--	0.242	--	--	--	--	--	--	--	330	1,390
MW097P	6/21/2012	N	--	< 0.00400 U	--	< 0.00400 U	--	--	--	--	--	--	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--
	7/10/2012	N	--	--	--	0.631	--	0.665	--	--	--	--	--	--	--	--	--	--	--	--
	9/5/2012	N	--	--	--	0.323	--	0.322	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--
	11/19/2012	N	--	--	--	0.562	--	0.436	< 0.200 U	< 0.200 U	--	--	--	--	--	--	--	--	--	--
	5/7/2014	N	0.0111 J	--	< 0.0100 UJ	--	--	0.0284	< 0.200 U	--	0.452	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	535	2,110
	6/2/2015	N	0.00646 J	--	0.00454 J	--	--	< 0.0100 U	< 0.200 U	--	0.324	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	605	2,450
	5/19/2016	N	0.0109	--	0.456	--	0.346	--	--	--	--	--	--	--	--	--	--	--	855	3,880
	5/4/2017	N	0.00811	--	0.39	--	0.379	--	< 0.02 U	--	0.0722	--	--	--	--	--	--	--	1,010	3,760
	4/4/2018	Reg	--	0.00869	--	0.385	--	0.371	< 0.100 U	--	--	0.0554	--	--	--	--	--	--	965	3,670
	12/12/2016	N	< 0.01 U	--	< 0.01 U	--	< 0.01 U	--	0.523	--	0.0249	--	--	--	--	--	--	--	63.2	520
MW099	5/11/2017	N	0.0375	--	0.00134 J	--	< 0.01 U	--	0.0509 J	--	0.387	--	--	--	--	--	--	--	74	336
	9/21/2017	N	0.0297	--	< 0.00400 U	--	--	< 0.0100 U	0.0705 J	--	0.322	--	--	--	--	--	--	--	66.9	496
	3/29/2018	Reg	--	0.0124	--	< 0.00400 U	--	< 0.0100 U	0.0835	--	--	0.262	--	--	--	--	--	--	64.8	429
	3/29/2018	FD	--	0.012	--	< 0.00400 U	--	< 0.0100 U	0.0661	--	--	0.252	--	--	--	--	--	--	67.2	447
	9/13/2018	Reg	0.00898 J	--	< 0.0200 U	--	< 0.0100 U	--	--	< 0.500 U	0.219	--	--	--	--	--	--	--	64.6	496
MW100	12/12/2016	N	< 0.01 U	--	< 0.01 U	--	< 0.01 U	--	0.0211 J	--	0.39	--	--	--	--	--	--	--	172	722
	5/9/2017	N	0.00793	--	0.00191 J	--	< 0.01 U	--	0.151 J	--	0.184	--	--	--	--	--	--	--	690	1,780
	5/9/2017	FD	0.00873	--	0.00209 J	--	< 0.01 U	--	0.212 J	--	0.246	--	--	--	--	--	--	--	632	1,700
	9/20/2017	N	0.0129	--	0.00223 J	--	< 0.01 U	--	0.528	--	0.124	--	--	--	--	--	--	--	667 J	1640 J
	9/20/2017	FD	0.0139	--	0.00125 J	--	< 0.01 U	--	0.426	--	0.116	--	--	--	--	--	--	--	216 J	760 J
	3/22/2018	Reg	--	0.00858	--	< 0.00400 U	--	< 0.0100 U	0.0727	--	--	0.172	--	--	--	--	--	--	743	2,200
	9/11/2018	Reg	0.00935	--	< 0.00400 U	--	< 0.0100 U	--	--	0.0583 J	0.253	--	--	--	--	--	--	--	789	1,640
	9/11/2018	FD	0.00906	--	< 0.00400 U	--	< 0.0100 U	--	--	0.0569 J	0.223	--	--	--	--	--	--	--	865	1,730
ROLANDWW	9/29/1997	N	< 0.10 U	--	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	1,100	2,700
RW001	1/19/1999	N	< 0.1 U	--	< 0.05 U	--	--	--	--	--	--	--	--	--	--	--	--	--	920	2,300
	2/17/1999	N	--	--	1.3	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	--	--	910	3,600
	2/18/1999	N	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--	920	3700
RW002	10/1/2001	N	--	--	3.08	--	--	2.6	< 0.1 U	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	0.12	1,600	4,730
	12/11/2001	N	--	--	--	--	--	4.2	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/2001	N	--	--	--	--	--	4.15	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2001	N	--	--	--	--	--	4.09	--	--	--	--	--	--	--	--	--	--	--	--
								4.09												
	2/4/2002	N	--	--	4.2	--	--	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	4,990
	6/10/2003	N	--	< 0.05 U	4.31	4.05	3.76	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,320	--
	7/1/2003	N	--	< 0.05 U	7.13	3.58	3.57	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,300	--
	7/2/2003	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/9/2003	N	--	< 0.05 U	4.27	4.11	3.16	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	7/15/2003	N	--	< 0.05 U	4.16	4.31	< 5 U	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	7/30/2003	N	--	< 0.05 U	4.26	4.22	3.3	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	60	--
	8/20/2003	N	--	< 0.05 U	4.07	4.07	1.6	--	< 0.1 U	< 0.1 U	0.08	0.08	--	--	--	--	--	--	1,300	--
	9/30/2003	N	--	< 0.05 U	4.07	3.95	2	--	0.2	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,700	--
	10/28/2003	N	--	< 0.05 U	3.85	3.78	3	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,200	--
	12/8/2003	N	--	< 0.05 U	4.04	3.67	1.6	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	--
	1/7/2004	N	--	< 0.05 U	3.99	4.51	2.1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,400	4,870
	3/4/2004	N	--	< 0.05 U	4.07	4.15	0.4	--	< 0.1 U	0.1	0.07	0.08	--	--	--	--	--	--	1,080	--
							0.44													
	4/1/2004	N	--	< 0.01 U	3.49	3.6	1.4	--	< 0.1 U	< 0.1 U	0.08	0.1	--	--	--	--	--	--	1,100	4,660
	5/17/2004	N	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/18/2004	N	--	< 0.01 U	3.58	3.83	1.2	--	< 0.1 U	< 0.1 U	0.06	0.07	--	--	--	--	--	--	1,200	--
	6/10/2004	N	--	--	--	--	3.7	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/2004	N	--	< 0.01 U	3.75	3.9	2.6	--	< 0.1 U	0.2	< 0.05 U	0.05	--	--	--	--	--	--	1,000	--
	7/8/2004	N	--	--	--	--	1.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/13/2004	N	--	< 0.01 U	4.03	3.58	2.4	--	< 0.1 U	0.2	< 0.05 U	0.06	--	--	--	--	--	--	1,190	--
	8/11/2004	N	--	--	--	--	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/16/2004	N	--	< 0.01 U	3.12	3.47	6.3	--	< 0.1 U	< 0.1 U	0.1	0.07	--	--	--	--	--	--	1,000	--
	9/15/2004	N	--	--	--	--	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/16/2004	N	--	< 0.01 U	3.02	3.09	1.3	--	< 0.1 U	< 0.1 U	0.2	0.16	--	--	--	--	--	--	1,080	--
	10/6/2004	N	--	--	--	--	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2004	N	--	< 0.01 U	2.01	2.11	0.6	--	1.4	1.4	0.8	0.81	--	--	--	--	--	--	1,110	--
	11/17/2004	N	--	< 0.01 U	1.58	1.81	2	--	< 0.4 U	1.27	0.64	0.69	--	--	--	--	--	--	1,030	4,930
	12/20/2004	N	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/2004	N	--	< 0.01 U	0.92	0.94	< 0.02 U	--	1.35	1.51	0.7	0.7	--	--	--	--	--	--	1,040	4,960

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
	1/25/2005	N	--	< 0.01 U	0.13	0.19	< 0.005 U	--	3.6	3.69	0.85	0.88	--	--	--	--	--	--	1,050	4,640
	2/9/2005	N	--	< 0.01 U	0.3	0.08	< 0.005 U	--	< 0.4 U	1.96	< 0.01 U	0.82	--	--	--	--	--	--	1,000	4,710
	3/9/2005	N	--	< 0.01 U	0.05	0.08	< 0.005 U	--	3.14	3.13	0.93	0.96	--	--	--	--	--	--	1,040	4,850
	4/12/2005	N	--	< 0.01 U	0.06	0.07	< 0.01 U	--	3.63	3.71	1.02	1.02	--	--	--	--	--	--	1,000	4,780
	5/12/2005	N	--	< 0.01 U	0.05	0.06	< 0.01 U	--	5.11	5.47	1.27	1.27	--	--	--	--	--	--	1,050	4,780
	6/8/2005	N	--	< 0.01 U	0.06	0.07	< 0.01 U	--	7.02	7.16	1.24	1.26	--	--	--	--	--	--	1,080	4,630
	7/7/2005	N	--	< 0.01 U	0.1	0.09	< 0.005 U	--	9.38	7.66	1.77	1.44	--	--	--	--	--	--	1,090	4,640
	2/10/2006	N	--	< 0.02 U	--	0.295	--	< 0.02 U	--	23.7	6.42	6.42	< 10 U	< 10 U	< 10 U	< 30 U	< 0.6 U	< 0.6 U	1,390	5,700
	7/20/2006	N	--	< 0.02 U	--	0.0581	--	< 0.02 U	--	21.8	1.79	1.79	< 1 U	< 1 U	< 1 U	< 3 U	0.38	< 0.05 U	1,220	4,980
	3/29/2007	N	--	< 0.02 U	--	0.205	--	< 0.02 U	--	40.7	1.51	1.51	< 1 U	< 1 U	< 1 U	< 3 U	< 0.1 U	< 0.05 U	1,080	--
	4/17/2008	N	--	< 0.02 U	--	0.0523	--	< 0.02 U	--	24.6	1.23	1.23	< 1 U	< 1 U	< 1 U	< 3 U	< 0.099 U	< 0.05 U	1,220	4,590
	3/31/2009	N	--	< 0.02 U	--	0.0662	--	< 2.00 U	--	14.8	1.64	1.64	< 5 U	< 5 U	< 5 U	< 15 U	6.6	< 0.25 U	942	5,160
	3/11/2010	N	--	< 0.05 U	--	< 0.05 U	--	0.152	--	8.85	2.96	2.96	< 1 U	< 1 U	< 1 U	< 1 U	1	< 0.05 U	369	3,500
	5/22/2012	N	< 0.0100 U	--	0.0126	--	--	0.0448	16.3	--	0.898	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	1,060	4,420
	5/20/2013	N	< 0.0200 U	--	0.0145	--	--	< 0.100 U	5.78	--	0.854	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	994	3,320
RW003	12/18/2001	N	--	--	--	3.55	--	2.4	--	--	--	--	--	--	--	--	--	--	--	--
	12/20/2001	N	--	--	--	3.08	--	2.4	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/2002	N	--	--	4.44	--	0.064	--	< 0.1 U	0.1	< 0.05 U	< 0.05 U	--	--	--	--	--	--	980	3,930
	6/10/2003	N	--	< 0.05 U	3.39	3.51	3.03	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	890	--
	6/10/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	900	--
	7/2/2003	N	--	< 0.05 U	3.85	3.35	2.69	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	800	--
	7/8/2003	N	--	< 0.05 U	3.11	3.08	2.86	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	--
	7/15/2003	N	--	< 0.05 U	3.74	3.87	< 5 U	--	< 0.1 U	< 1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	890	--
	7/30/2003	N	--	< 0.05 U	2.81	2.75	2.1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	770	--
	8/21/2003	N	--	< 0.05 U	3.17	3.32	2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	740	--
	9/30/2003	N	--	< 0.05 U	2.58	3.2	2.2	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	--
	10/28/2003	N	--	< 0.05 U	2.64	2.85	2.4	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	--
	12/9/2003	N	--	< 0.05 U	2.85	2.94	0.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	760	--
	1/7/2004	N	--	< 0.05 U	3.05	2.97	0.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	970	3,640
	2/19/2004	N	--	< 0.05 U	0.85	0.99	0.63	--	< 0.1 U	0.4	< 0.05 U	< 0.05 U	--	--	--	--	--	--	500	--
	4/6/2004	N	--	< 0.01 U	1.14	1.27	1	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	600	--
	5/6/2004	N	--	< 0.01 U	0.77	1.87	0.5	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	730	--
	6/8/2004	N	--	< 0.01 U	1.06	1.11	0.9	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	640	--
	7/14/2004	N	--	< 0.01 U	0.79	0.59	0.34	--	< 0.1 U	0.6	< 0.05 U	< 0.05 U	--	--	--	--	--	--	400	--
	8/16/2004	N	--	< 0.01 U	1.99	2.01	3.7	--	< 0.1 U	0.2	< 0.05 U	< 0.05 U	--	--	--	--	--	--	700	--
	9/9/2004	N	--	< 0.01 U	0.85	1.02	0.47	--	< 0.1 U	< 0.1 U	0.06	0.06	--	--	--	--	--	--	540	--
	10/7/2004	N	--	< 0.01 U	0.28	0.27	0.23	--	< 0.1 U	< 0.1 U	0.05	< 0.05 U	--	--	--	--	--	--	430	--
	11/10/2004	N	--	< 0.01 U	0.21	0.27	< 0.05 U	--	< 0.4 U	< 0.4 U	0.44	0.67	--	--	--	--	--	--	480	2,820
	12/28/2004	N	--	< 0.01 U	0.08	0.14	< 0.005 U	--	0.96	0.8	0.91	0.74	--	--	--	--	--	--	490	2,760
	1/18/2005	N	--	< 0.01 U	0.1	0.14	< 0.005 U	--	4.23	4.2	1.83	1.9	--	--	--	--	--	--	510	2,960
	2/10/2005	N	--	< 0.01 U	0.06	0.06	< 0.005 U	--	10	11.7	< 0.01 U	< 0.01 U	--	--	--	--	--	--	550	3,340
	3/10/2005	N	--	< 0.01 U	0.07	0.07	< 0.005 U	--	15.4	24.7	5.04	6.82	--	--	--	--	--	--	430	2,930
	4/13/2005	N	--	< 0.01 U	0.04	0.04	< 0.005 U	--	0.82	11.3	4.02	3.94	--	--	--	--	--	--	390	2,760
	5/18/2005	N	--	< 0.01 U	0.03	0.03	0.02	--	1.18	12	3.97	4.01	--	--	--	--	--	--	430	2,720
	6/14/2005	N	--	< 0.01 U	0.02	0.03	< 0.005 U	--	1	14.2	4.16	4.28	--	--	--	--	--	--	460	2,620
	7/12/2005	N	--	< 0.01 U	0.02	0.02	< 0.005 U	--	2.02	12.6	3.66	3.71	--	--	--	--	--	--	430	2,580
	7/19/2005	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/10/2006	N	--	0.0367	--	< 0.015 U	--	< 0.02 U	--	94.9	11.7	11.7	< 10 U	< 10 U	< 10 U	< 30 U	< 3 U	< 12 U	545	3,130
	7/20/2006	N	--	0.0656	--	< 0.015 U	--	< 0.02 U	--	73.8	1.15	1.15	< 5 U	< 5 U	< 5 U	< 15 U	< 2.4 U	< 0.25 U	585	2,730
	4/2/2007	N	--	0.128	--	< 0.015 U	--	< 0.2 U	--	44.9	0.889	0.889	< 5 U	< 5 U	< 5 U	< 15 U	1.1	< 0.25 U	627	--
	4/21/2008	N	--	0.12	--	< 0.015 U	--	< 0.5 U	--	40.4	0.833	0.833	< 5 U	< 5 U	< 5 U	< 1.5 U	0.67	0.25	441	2,700
	4/1/2009	N	--	0.101	--	< 0.015 U	--	< 0.2 U	--	53.3	0.05	0.05	< 5 U	< 5 U	< 5 U	< 15.0 U	0.76	< 0.25 U	487	2,170
	3/11/2010	N	--	< 0.5 U	--	< 0.500 U	--	< 0.1 U	--	3.71	4.55	4.55	< 1 U	< 1 U	< 1 U	< 1 U	0.138	< 0.05 U	299	1,900
	5/21/2012	N	< 0.0100 U	--	< 0.0100 U	--	--	< 0.0100 U	19	--	0.931	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	584	2,550
	5/22/2013	N	0.0362	--	0.019	--	--	< 0.0100 U	4.97	--	1.02	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	550	2,270
	5/28/2014	N	0.00909 J	--	< 0.0100 U	--	--	< 0.0500 U	0.154 J	--	0.622	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	474	1,970
	5/22/2015	N	< 0.0200 U	--	0.00102 J	--	--	< 0.0500 U	0.140 J	--	0.704	--	< 1.00 U	< 2.00 U	< 1.00 U	< 1.00 U	--	--	516	1,080
	5/13/2016	N	0.0787	--	< 0.00136 U	--	< 0.00548 U	--	--	--	--	--	--	--	--	--	--	--	339	1,990
	5/5/2017	N	0.0792	--	< 0.004 U	--	< 0.01 U	--	38.7	--	1.21	--	--	--	--	--	--	--	509	2,460
	10/1/2001	N	--	--	3.11	--	--	2	0.1	--	--	--	400	1200	< 2 U	< 2 U	< 0.25 U	0.63	1,120	2,000
	12/6/2001	N	--	--	--	4.26	--	2	--	--	--	--	--	--	--	--	--	--	--	--
	12/7/2001	N	--	--	--	4.17	--	1.9	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/2001	N	--	--	--	4.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/2002	N	--	--	--	4.33	--	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	1,100	4,250
	9/18/2002	N	--	--	--	3.63	--	3	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	< 0.25 U	< 0.05 U	860	--
	6/9/2003	N	--	< 0.05 U	5.43	2.61	4.62	--	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	860	--
	6/9/2003	FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	880	--

North Eunice Historical Data 20190117.xlsx

Chemical Name			Dissolved Arsenic	Total Arsenic	Dissolved Chromium	Total Chromium	Dissolved Chromium VI	Total Chromium VI	Dissolved Iron	Total Iron	Dissolved Manganese	Total Manganese	Benzene	Toluene	Ethylbenzene	Total Xylenes	DRO	GRO	Chloride	TDS
Units			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l
NMWQCC Standard			0.1	0.1	0.05	0.05	0.05	0.05	1	1	0.2	0.2	5	1,000	700	620			250	1000
Location ID	Sample Date	Sample Type																		
ted analytes are bolded.																				
-- = not analyzed																				
< = less than																				
diluted due to instrument range																				
+ field duplicate sample																				
ID = identification																				
I = estimated value																				
I = milligrams per liter																				
N = Normal Sample																				
xico Water Quality Control Commission																				
= total dissolved solids																				
U = non-detect																				
= micrograms per liter																				

APPENDIX F

Historical Analytical Data (2017 to current)



**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
IW001	5/5/2017	REG	0.0179 J	0.0108 J	< 0.0100 U	1.54 J	--	1.84 J
IW002	5/5/2017	REG	0.0172	0.0116	< 0.0100 U	25.6	--	1.1
IW003	5/8/2017	REG	0.0137	0.00781	< 0.0100 U	6.3	--	8.02
IW003	3/22/2018	REG	0.00717	0.00409	0.00330 J	3.57	1.94	--
IW003	4/15/2019	REG	0.0157	0.0088	< 0.0100 U	5.02	--	3.74
IW004	5/8/2017	REG	0.00202	0.0123	< 0.0100 U	1.68	--	3.97
IW005	5/8/2017	REG	0.0186	0.0124	< 0.0100 U	10.9	--	2.73
IW006	5/8/2017	REG	0.0196	0.00869	< 0.0100 U	3.93	--	4.15
IW007	5/8/2017	REG	0.0843	0.0192	< 0.0100 U	17.1	--	3.93
IW008	5/8/2017	REG	0.033	0.00545	< 0.0100 U	5.22	--	1.93
IW008	5/8/2017	FD	0.0323	0.00515	< 0.0100 U	5.34	--	1.97
IW008	3/22/2018	REG	0.0248	0.00370 J	< 0.0100 U	4.24	1.2	1.58
IW008	4/12/2019	REG	0.0235	0.00388 J	< 0.0100 U	4.78	--	1.9
IW010	5/8/2017	REG	0.00571	< 0.00400 U	0.00620 J	11	--	7.31
IW010	3/22/2018	REG	0.00789	0.00191 J	< 0.0100 U	8.83	0.0599	5.01
IW010	4/12/2019	REG	0.00899	0.00202 J	0.00310 J	11.8	--	7.96
IW011	5/8/2017	REG	0.00779	< 0.00400 U	< 0.0100 U	0.173	--	0.588
IW012	5/8/2017	REG	0.0103	0.0126	< 0.0100 U	2.55	--	0.32
IW013	5/8/2017	REG	0.00494	0.00637	< 0.0100 U	0.839	--	0.18
IW014	5/8/2017	REG	0.0346	0.00776	< 0.0100 U	0.0237	--	0.2
IW015	5/8/2017	REG	0.0102	0.0119	< 0.0100 U	0.196	--	0.0861
IW016	5/8/2017	REG	0.00501	< 0.00400 U	< 0.0100 UJ	0.0498	--	0.0772
IW019	5/5/2017	REG	0.00833 J	0.563 J	0.87	< 0.0200 U	--	0.0328 J
IW019	9/26/2017	REG	0.00947	0.743	0.693	0.157 J	--	0.24
IW019	4/4/2018	REG	0.00908	0.66	0.616	< 0.100 U	--	0.381
IW019	9/11/2018	REG	0.0101	0.757	0.687	< 0.100 U	--	0.0349
IW019	4/16/2019	REG	0.00987	0.672	0.664	0.0721 J	--	0.139
IW019	4/16/2019	FD	0.0106 J	0.736	0.698	< 0.500 U	--	0.105
IW019	10/10/2019	REG	0.00931	0.621	0.609	< 0.100 U	--	0.0482 J
IW021	5/5/2017	REG	0.00845	0.706	0.766	< 0.0200 U	--	< 0.00200 U
IW022	5/5/2017	REG	0.00833	0.171	0.178	< 0.0200 U	--	< 0.00200 U
IW023	5/5/2017	REG	0.00817	0.397	0.41	< 0.0200 U	--	< 0.00200 U
IW023	9/22/2017	REG	0.00936	0.423	0.406	0.0417 J	--	0.00149 J
IW023	3/29/2018	REG	0.00871	0.378	0.369	< 0.1	--	0.000378 J
IW023	9/14/2018	REG	0.0102	0.376	0.307	< 0.100 U	--	0.000254 J
IW023	9/14/2018	FD	0.0101	0.383	0.269	< 0.100 U	--	< 0.00200 U
IW023	4/16/2019	REG	0.00961	0.345 J	0.315 J	0.0487 J	--	0.00282
IW023	10/10/2019	REG	0.00981	0.315	0.312	0.0668 J	--	0.00412 J
IW024	5/4/2017	REG	0.00877	1.13	1.26	< 0.0200 U	--	< 0.00200 U
IW024	4/4/2018	REG	0.00924	0.99	1.04	< 0.100 U	--	0.000827 J
IW024	4/16/2019	REG	0.0113	1.21	1.02	0.321	--	0.0288
IW025	5/4/2017	REG	< 0.00200 U	0.0255	< 0.0100 U	0.063	--	0.822

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
IW026	5/4/2017	REG	0.0085	0.69	0.737	< 0.0200 U	--	< 0.00200 U
IW027	5/4/2017	REG	0.00815	0.282	0.293	0.189	--	0.00787
IW028	5/4/2017	REG	0.00949	0.694	0.758	< 0.0200 U	--	0.00436
IW029P	5/11/2017	REG	0.106	0.00148 J	< 0.0100 U	81.4	--	4.41
IW029P	5/11/2017	FD	0.107	0.00185 J	< 0.0100 U	80.7	--	4.18
LordWW	5/11/2017	REG	0.000551 J	0.00161 J	< 0.0100 U	0.18	--	0.0971
MW001	5/10/2017	REG	0.00199 J	0.0181	< 0.0100 U	0.0102 J	--	0.91
MW001	5/10/2017	FD	0.00185 J	0.02	0.0135	0.0125 J	--	0.937
MW001	9/26/2017	REG	0.00221	0.00906	< 0.0100 U	< 0.100 U	--	0.694
MW001	4/4/2018	REG	0.00154 J	0.00146 J	< 0.0100 U	< 0.100 U	--	0.739
MW001	9/11/2018	REG	0.00241 J	0.00146 J	< 0.0100 U	< 0.100 U	--	0.584
MW001	4/17/2019	REG	0.00174 J	0.00142 J	< 0.0100 U	< 0.100 U	--	0.858
MW001	10/10/2019	REG	0.00160 J	0.00176 J	< 0.0100 U	< 0.100 U	--	0.954 J
MW002	5/9/2017	REG	0.00922 J	0.285	0.271	< 0.100 U	--	0.00199 J
MW002A	5/9/2017	REG	0.0164	0.709	0.781	< 0.100 U	--	0.0235
MW002A	9/22/2017	REG	0.0204	0.867	0.892	0.0591 J	--	0.0234
MW002A	4/4/2018	REG	0.0146	0.638	0.724	< 0.100 U	--	0.0163
MW002A	9/14/2018	REG	0.0195	0.963	0.796	< 0.100 U	--	0.0193
MW002A	4/17/2019	REG	0.0193	0.889	0.00890 J	< 1.00 U	--	0.0201
MW002A	10/10/2019	REG	0.0177	0.812	0.758	< 0.100 U	--	0.0163 J
MW002A	10/10/2019	FD	0.0192	0.917	0.79	< 0.100 U	--	0.0190 J
MW003	5/4/2017	REG	0.0135	0.0481	< 0.0100 U	< 0.0200 U	--	< 0.00200 U
MW004	5/5/2017	REG	0.00984	0.339 J	0.257 J	0.0228	--	< 0.00200 UJ
MW004	5/5/2017	FD	0.00898	0.672 J	0.796 J	< 0.0200 U	--	0.0428 J
MW004A	5/5/2017	REG	0.0154 J	0.489 J	0.494	< 0.0200 U	--	< 0.00200 U
MW004A	9/22/2017	REG	0.0154	0.463	0.448	< 0.100 U	--	0.000947 J
MW004A	4/4/2018	REG	0.0145	0.498	0.438	< 0.100 U	--	0.000681 J
MW004A	9/14/2018	REG	0.0158	0.515	0.497	< 0.100 U	--	0.000320 J
MW004A	4/16/2019	REG	0.0156	0.558	0.459	< 0.100 U	--	0.000551 J
MW004A	10/11/2019	REG	0.0148 J	0.415	0.378	< 0.500 U	--	< 0.0100 U
MW007	5/4/2017	REG	0.0119	0.0105	< 0.0100 U	< 0.0200 U	--	< 0.00200 U
MW007A	5/4/2017	REG	0.0102	0.661	0.769	< 0.0200 U	--	< 0.00200 U
MW007A	9/22/2017	REG	0.0116	0.729	0.65	< 0.100 U	--	0.00327
MW007A	4/4/2018	REG	0.0102	0.705	0.129	< 0.100 U	--	0.000979 J
MW007A	9/14/2018	REG	0.0115	0.763	0.67	< 0.100 U	--	0.000655 J
MW007A	4/17/2019	REG	0.0109	0.711	0.66	< 1.00 U	--	0.000644 J
MW007A	10/11/2019	REG	0.0113 J	0.676	0.592	< 0.500 U	--	0.00257 J
MW008	5/4/2017	REG	0.0191	0.00575	< 0.0100 U	4.61	--	0.583
MW008A	5/4/2017	REG	0.0618	0.0767	< 0.0100 U	17	--	0.176
MW008M	5/4/2017	REG	0.00325	0.0101	< 0.0100 U	59.9	--	3.11
MW008M	9/22/2017	REG	0.0032	0.00823	< 0.0100 U	56.5	--	3.23
MW008M	4/4/2018	REG	0.00803	0.0219	< 0.0100 U	107	--	2.96

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW008M	4/4/2018	FD	0.00222	0.00842	< 0.0100 U	91.3	--	3.23
MW008M	9/14/2018	REG	0.00312 J	0.00775	< 0.0100 U	40.4	--	3.08
MW008M	4/17/2019	REG	0.00329 J	0.0071	0.00430 J	35.9	--	2.95
MW008M	10/10/2019	REG	0.00362 J	0.00693	0.00710 J	26.5	--	2.80 J
MW009	5/4/2017	REG	0.00655	0.0151	0.0115	< 0.0200 U	--	0.0111
MW009A	5/4/2017	REG	0.00378	0.00684	< 0.0100 U	0.0912 UB	--	1.03
MW010	5/9/2017	REG	0.00884	0.0295	0.0271	0.0314	--	0.00459
MW010	9/21/2017	REG	0.00803	0.0190 J	0.00310 J	< 0.100 U	--	0.0104
MW010	4/2/2018	REG	0.00889	0.0242	0.0157	< 0.100 U	--	0.000740 J
MW010	9/13/2018	REG	0.00939 J	0.0228	0.012	< 0.500 U	--	0.00206 J
MW010	4/16/2019	REG	0.00885 J	0.0273	0.0213	< 0.500 U	--	< 0.0100 U
MW010	10/10/2019	REG	0.00811	0.02	0.088	< 0.100 U	--	0.00474 J
MW010	10/10/2019	FD	0.00883	0.016	0.0135	< 0.100 U	--	0.00284 J
MW011	5/5/2017	REG	0.00802 J	0.00476 UB	< 0.0100	16.5 J	--	1.64
MW011A	5/5/2017	REG	0.0128 J	1.03 J	0.976	< 0.0200 U	--	0.197 J
MW011A	9/22/2017	REG	0.0133	0.692	0.65	< 0.100 U	--	0.182
MW011A	9/22/2017	FD	0.0134	0.707	0.645	< 0.100 U	--	0.183
MW011A	4/4/2018	REG	0.0119	0.371	0.329	< 0.100 U	--	0.16
MW011A	9/14/2018	REG	0.0142	0.291	0.242	< 0.100 U	--	0.193
MW011A	9/14/2018	FD	0.0136	0.277	0.239	< 0.100 U	--	0.187
MW011A	4/17/2019	REG	0.0144	0.159	< 0.0100 U	< 0.100 U	--	0.182
MW011A	10/10/2019	REG	0.0133	0.1	0.0834	< 0.100 U	--	0.167 J
MW011M	5/5/2017	REG	0.00253 J	0.0202 J	< 0.0100 U	2.28 J	--	0.0305 J
MW012	5/5/2017	REG	0.0149	< 0.00400 U	< 0.0100 U	3.08	--	4.29
MW012A	5/5/2017	REG	0.0163	< 0.00400 U	< 0.0100 U	0.0741	--	0.0559
MW012M	5/5/2017	REG	0.105	0.0411	< 0.0100 U	7.82	--	0.0876
MW012M	4/4/2018	REG	0.0815	0.0351	< 0.0100 U	4.76	--	0.052
MW012M	4/17/2019	REG	0.0652	0.0306	< 0.0100 U	3.94	--	0.0507
MW013	5/9/2017	REG	0.00811	1.42	0.15	0.0226	--	0.000450 J
MW013	9/21/2017	REG	0.00734	1.25 J	1.25	< 0.100 U	--	0.00442
MW013	4/2/2018	REG	0.00798	1.75	1.88	< 0.100 U	--	0.000295 J
MW013	9/13/2018	REG	0.00757	1.76	1.84	< 0.100 U	--	0.000747 J
MW013	4/16/2019	REG	0.00809	2.54	2.22 J	< 0.100 U	--	< 0.00200 U
MW013	10/10/2019	REG	0.00767	1.97	1.75	0.0266 J	--	0.000714 J
MW013A	5/11/2017	REG	0.0195	0.00456	0.00320 J	0.00385 J	--	0.000398 J
MW015	5/11/2017	REG	0.00558	0.00267 J	< 0.0100 U	0.00384 J	--	0.000542 J
MW015A	5/11/2017	REG	0.0105	0.0123	0.0112	0.0119 J	--	0.00376
MW015A	9/22/2017	REG	0.00763	0.00192 J	0.00240 J	0.152	--	0.00417
MW015A	4/2/2018	REG	0.00351	0.00546	< 0.0100 U	0.24	--	0.0428
MW015A	4/2/2018	FD	0.00222	0.0048	< 0.0100 U	0.214	--	0.0573
MW015A	9/13/2018	REG	0.00882 J	0.00534 J	< 0.0100 U	0.164 J	--	0.0197
MW015A	4/16/2019	REG	0.0136 J	0.00983 J	< 0.0100 UJ	< 0.500 U	--	0.00203 J

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW015A	10/9/2019	REG	0.012	0.0127	0.00480 J	0.0304 J	--	0.00551
MW016A	9/14/2018	REG	0.00914	0.00528	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW018	5/10/2017	REG	0.00994	< 0.00129 UB	< 0.0100 U	0.00457 J	--	< 0.00200 U
MW018	9/21/2017	REG	0.0128	< 0.00400 U	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW018	4/2/2018	REG	0.00969	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.00133 J
MW018	4/2/2018	FD	0.00933	0.000717 J	< 0.0100 U	< 0.100 U	--	0.00151 J
MW018	9/13/2018	REG	0.00937 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.00220 J
MW018	4/16/2019	REG	0.0124	< 0.00400 U	< 0.0100 U	0.0574 J	--	0.00194 J
MW018	10/9/2019	REG	0.0103	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.000437 J
MW019A	5/10/2017	REG	0.0106	0.00182 J	< 0.0100 U	0.0154 J	--	0.00169 J
MW019A	9/21/2017	REG	0.0134	0.000637 J	< 0.0100 U	< 0.100 U	--	0.000387 J
MW019A	4/2/2018	REG	0.0125	0.000668 J	< 0.0100 U	< 0.100 U	--	0.00157 J
MW019A	9/13/2018	REG	0.0116 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.0118
MW019A	4/16/2019	REG	0.00627	0.000853 J	< 0.0100 U	0.0538 J	--	0.0179
MW019A	10/9/2019	REG	0.0103	0.000533 J	< 0.0100 U	< 0.100 U	--	0.00424
MW020	5/11/2017	REG	0.0105	0.00371 J	< 0.0100 U	0.0236	--	0.00101 J
MW020A	5/11/2017	REG	0.00893	0.00723	0.00290 J	0.00408 J	--	0.000342 J
MW020A	9/21/2017	REG	0.0108	0.00696 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW020A	4/2/2018	REG	0.0101	0.00589	< 0.0100 U	< 0.100 U	--	0.00115 J
MW020A	9/13/2018	REG	0.0112 J	0.00675 J	< 0.0100 U	< 0.500 U	--	0.00217 J
MW020A	4/16/2019	REG	0.0111 J	0.00560 J	< 0.0100 U	< 0.500 U	--	0.00112 J
MW020A	4/16/2019	FD	0.0106 J	0.00511	< 0.0100 U	< 0.500 U	--	0.00123 J
MW020A	10/9/2019	REG	0.00988	0.00604	0.00630 J	< 0.100 U	--	0.000518 J
MW021A	5/10/2017	REG	0.00938	0.00422	< 0.0100 U	0.0123 J	--	0.0724
MW021A	9/22/2017	REG	0.0117	0.00429	< 0.0100 U	< 0.100 U	--	0.0106
MW021A	4/3/2018	REG	0.0106	0.00392 J	< 0.0100 U	< 0.100 U	--	0.0159 J
MW021A	9/12/2018	REG	0.0106	0.00352 J	< 0.0100 U	< 0.100 U	--	0.0108
MW021A	4/12/2019	REG	0.011	0.00295 J	< 0.0100 U	< 0.100 U	--	0.0126
MW021A	10/10/2019	REG	0.0113	0.00301 J	< 0.0100 U	0.0228 J	--	0.0166 J
MW023	5/11/2017	REG	0.00749	1.09	1.05	0.00308 J	--	0.000372 J
MW023	9/21/2017	REG	0.01	1.32 J	1.09	< 0.100 U	--	< 0.00200 U
MW023	3/29/2018	REG	0.00928	1.42	1.31	< 0.1	--	0.000486 J
MW023	9/13/2018	REG	0.00933	1.72	1.43	< 0.100 U	--	< 0.00200 U
MW023	4/15/2019	REG	0.00878	2.22	2.07	0.0352 J	--	0.00488
MW023	10/8/2019	REG	0.00946	2.75	2.32	< 0.100 U	--	< 0.00200 U
MW023A	5/11/2017	REG	0.0189	0.00535	< 0.0100 U	0.00417 J	--	0.000257 J
MW024	5/11/2017	REG	0.00875	0.128	0.13	0.00318 J	--	0.00809
MW024A	5/11/2017	REG	0.0109	0.724	0.785	0.00442 J	--	0.000468 J
MW024A	9/21/2017	REG	0.0128	0.437 J	0.457 J	< 0.100 U	--	0.000585 J
MW024A	9/21/2017	FD	0.012	0.689 J	< 0.852 UJ	< 0.100 U	--	< 0.00200 U
MW024A	3/29/2018	REG	0.012	0.621	0.479	< 0.1	--	0.000484 J
MW024A	9/12/2018	REG	0.0125	0.579	0.477	< 0.100 U	--	< 0.00200 U

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW024A	9/12/2018	FD	0.0126	0.547	0.52	< 0.100 U	--	0.000247 J
MW024A	4/12/2019	REG	0.0119	0.5	0.474	< 0.100 U	--	< 0.00200 U
MW024A	10/8/2019	REG	0.0128	0.504	0.457	< 0.100 U	--	< 0.00200 U
MW026	9/22/2017	REG	0.00716	< 0.00400 U	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW026	4/5/2018	REG	0.00716	0.00255 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW026	9/13/2018	REG	0.00774 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.00160 J
MW026	4/16/2019	REG	0.00768	< 0.00400 U	< 0.0100 UJ	< 0.100 U	--	0.000977 J
MW026	10/11/2019	REG	0.00801	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.000348 J
MW027	5/11/2017	REG	0.00529	0.00238 J	< 0.0100 U	0.00482 J	--	0.000440 J
MW027	9/22/2017	REG	0.00703	0.00211 J	< 0.0100 U	< 0.100 U	--	0.000557 J
MW027	4/3/2018	REG	0.0063	0.00154 J	< 0.0100 U	< 0.100 U	--	0.00155 J
MW027	9/13/2018	REG	0.00682 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.00133 J
MW027	4/16/2019	REG	0.00653	0.00139 J	< 0.0100 UJ	0.0457 J	--	0.00129 J
MW027	10/9/2019	REG	0.00685	0.00107 J	< 0.0100 U	< 0.100 U	--	0.000539 J
MW030	5/11/2017	REG	0.0144	0.00256 J	< 0.0100 U	0.0300 J	--	0.00120 J
MW030	9/21/2017	REG	0.0194	0.00147 J	< 0.0100 U	0.0315 J	--	0.000561 J
MW030	3/29/2018	REG	0.0179	0.00135 J	< 0.0100 U	< 0.1	--	0.000316 J
MW030	9/13/2018	REG	0.0189 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.00159 J
MW030	4/12/2019	REG	0.0197	0.00126 J	< 0.0100 U	< 0.100 U	--	0.000594 J
MW030	10/8/2019	REG	0.0204	0.00156 J	< 0.0100 U	0.0382 J	--	0.000554 J
MW030P	5/4/2017	REG	0.239	0.0101	0.027	65.3	--	0.465
MW031	5/11/2017	REG	0.0144	0.00175 J	< 0.0100 U	0.00590 J	--	0.000627 J
MW031	9/21/2017	REG	0.0227	< 0.00400 U	< 0.0100 U	0.0475 J	--	0.815
MW031	3/29/2018	REG	0.0511	< 0.00400 U	< 0.0100 U	0.538	--	1.36
MW031	9/13/2018	REG	0.102	< 0.0200 U	< 0.0100 U	4.17	--	1.02
MW031	4/15/2019	REG	0.0847	< 0.00400 U	< 0.0100 U	3.36	--	0.866
MW031	10/9/2019	REG	0.0962 J	< 0.00400 U	0.00570 J	4.93 J	--	0.833
MW031	10/9/2019	FD	0.0550 J	< 0.00400 U	< 0.0100 U	2.08 J	--	0.818
MW032	9/22/2017	REG	0.00397	0.00188 J	< 0.0100 U	0.0228 J	--	0.00117 J
MW032	4/3/2018	REG	0.00332	0.00177 J	< 0.0100 U	< 0.100 U	--	0.000594 J
MW032	9/13/2018	REG	0.00389 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.00249 J
MW032	4/16/2019	REG	0.00370 J	0.00473	< 0.0100 UJ	< 0.100 U	--	0.00172 J
MW032	4/16/2019	FD	0.00315 J	0.00505	< 0.0100 U	0.0230 J	--	0.00127 J
MW032	10/9/2019	REG	0.00362 J	0.00407	0.00350 J	< 0.100 U	--	0.000854 J
MW034	5/5/2017	REG	0.00624	0.0185	0.0126	0.0438	--	< 0.00200 U
MW036	5/9/2017	REG	0.06	0.00153 J	< 0.0100 U	29.7	--	0.358
MW037	5/9/2017	REG	0.0604	0.00211 J	0.00250 J	15.1	--	0.617
MW037	9/26/2017	REG	0.0526	0.00311 J	< 0.0100 U	8.70 J	--	0.178
MW037	4/4/2018	REG	0.0433	0.00105 J	< 0.0100 U	8.01	--	0.0823
MW037	4/4/2018	FD	0.0413	0.00107 J	< 0.0100 U	7.74	--	0.0796
MW037	9/11/2018	REG	0.0502	0.00126 J	< 0.0100 U	7.15	--	0.0653
MW037	4/16/2019	REG	0.0546	0.00116 J	< 0.0100 U	8.05	--	0.0493

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW037	10/10/2019	REG	0.0538	0.00111 J	0.0131	7.15	--	0.0537 J
MW038	5/9/2017	REG	0.0114	0.0042	0.00810 J	9.62	--	0.14
MW038	5/9/2017	FD	0.0116	0.00449	0.00710 J	9.27	--	0.114
MW040A	5/9/2017	REG	0.0176	0.00285 J	< 0.0100 U	0.00278 J	--	< 0.00200 U
MW040A	9/21/2017	REG	0.0187	0.00164 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW040A	4/2/2018	REG	0.0207	0.00231 J	< 0.0100 U	< 0.100 U	--	0.000290 J
MW040A	9/13/2018	REG	0.0195 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.00163 J
MW040A	4/16/2019	REG	0.0203	0.00285 J	< 0.0100 UJ	< 0.100 U	--	0.000271 J
MW040A	10/10/2019	REG	0.02	0.00312 J	< 0.0100 U	< 0.100 U	--	< 0.00200 UJ
MW041A	5/5/2017	REG	0.0093	0.197	0.203	0.0462	--	0.00232
MW041A	9/21/2017	REG	0.0104	0.210 J	0.174	0.0310 J	--	0.0024
MW041A	3/29/2018	REG	0.00948	0.206	0.184	< 0.1	--	0.00242
MW041A	9/12/2018	REG	0.0103	0.206	0.167	< 0.100 U	--	0.00121 J
MW041A	4/16/2019	REG	0.0104	0.201	0.175	< 0.100 U	--	0.00107 J
MW041A	10/9/2019	REG	0.0104	0.193	0.178	< 0.100 U	--	0.000914 J
MW042A	5/9/2017	REG	0.00693 J	0.391	0.381	0.0624 J	--	0.0279
MW043	5/9/2017	REG	0.00198 J	0.00207 J	< 0.0100 U	1.31	--	0.549
MW043	9/26/2017	FD	0.00366	0.00214 J	< 0.0100 U	1.28 J	--	0.653
MW043	9/26/2017	REG	0.00427	0.00202 J	< 0.0100 U	0.739 J	--	0.626
MW043	4/3/2018	REG	0.00535	0.00110 J	< 0.0100 U	0.345	--	0.608 J
MW043	9/11/2018	REG	0.00508	0.000688 J	< 0.0100 U	0.152	--	0.545
MW043	9/11/2018	FD	0.00524	0.000605 J	< 0.0100 U	0.156	--	0.553
MW043	4/15/2019	REG	0.00504	0.000894 J	< 0.0100 U	0.593	--	0.573
MW043	10/10/2019	REG	0.00503	0.000528 J	< 0.0100 U	0.257	--	0.499 J
MW044	5/9/2017	REG	0.00578 J	0.0554	< 0.0100 U	0.178	--	0.212
MW044	4/4/2018	REG	0.00843	0.00235 J	< 0.0100 U	0.471	--	0.077
MW045	5/9/2017	REG	< 0.0100 U	0.0197 J	< 0.0100 U	0.0201 J	--	0.0579
MW045	9/26/2017	REG	0.00229	0.0195	< 0.0100 U	< 0.100 U	--	0.0614
MW045	4/5/2018	REG	0.00173 J	0.0126	< 0.0100 U	< 0.100 U	--	0.0634
MW045	4/5/2018	REG	0.00196 J	0.0139	< 0.0100 U	< 0.100 U	--	0.0618
MW045	4/5/2018	REG	0.00177 J	0.0142	< 0.0100 U	< 0.100 U	--	0.0604
MW045	9/11/2018	REG	0.00213 J	0.0131	< 0.0100 U	< 0.100 U	--	0.071
MW045	4/17/2019	REG	0.00232 J	0.012	< 0.0100 U	0.0767 J	--	0.0782
MW045	4/17/2019	FD	0.00221 J	0.0111	< 0.0100 U	0.0544 J	--	0.0736
MW045	10/10/2019	REG	0.00203 J	0.0103	< 0.0100 U	< 0.100 U	--	0.0751 J
MW046	5/9/2017	REG	0.0438	0.00500 J	< 0.0100 U	3.5	--	0.776
MW046A	5/9/2017	REG	0.0103	1.69	1.78	0.105	--	0.0253
MW046A	9/26/2017	REG	0.0113	1.84	1.63	0.0416 J	--	0.00285
MW046A	4/4/2018	REG	0.01	1.74	1.57	< 0.100 U	--	0.0028
MW046A	9/11/2018	REG	0.0106	1.77	1.67	< 0.100 U	--	0.00129 J
MW046A	4/17/2019	REG	0.0103	1.49	1.73	< 1.00 U	--	0.00333
MW046A	10/10/2019	REG	0.0103	2.08	2.19	0.108	--	0.00398 J

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name Report Units			Arsenic mg/L	Chromium mg/L	Chromium, Hexavalent mg/L	Iron mg/L	Barium mg/L	Manganese mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW047	5/10/2017	REG	0.00901	0.107	0.136	0.00410 J	--	< 0.00200 U
MW047	9/22/2017	REG	0.0105	0.129	0.139	< 0.100 U	--	< 0.00200 U
MW047	4/4/2018	REG	0.0107	0.0896	0.0746	< 0.100 U	--	0.000787 J
MW047	9/14/2018	REG	0.012	0.06	0.0507	< 0.100 U	--	< 0.00200 U
MW047	4/17/2019	REG	0.0116	0.0809	0.0709	0.0228 J	--	0.000519 J
MW047	10/11/2019	REG	0.00113 J	0.00379 J	< 0.0100 U	0.0560 J	--	1.13
MW048SA	5/5/2017	REG	0.00985	0.576	0.55	0.0411	--	< 0.00200 U
MW048SA	5/5/2017	FD	0.00976	0.54	0.55	< 0.0200 U	--	< 0.00200 U
MW048SA	9/20/2017	REG	0.0111	0.559	0.542	< 0.100 U	--	0.000794 J
MW048SA	3/23/2018	REG	0.0117	0.457	0.453	< 0.1	--	0.000252 J
MW048SA	9/12/2018	REG	0.0119	0.453	0.404	0.136	--	0.000896 J
MW048SA	4/16/2019	REG	0.0121	0.396	0.363	0.0259 J	--	0.00124 J
MW048SA	10/9/2019	REG	0.0115	0.369	0.36	0.0356 J	--	0.00168 J
MW049SA	5/5/2017	REG	0.00926	0.185	0.193	0.0205	--	< 0.00200 U
MW049SA	9/20/2017	REG	0.0107	0.196	0.19	< 0.100 U	--	0.000498 J
MW049SA	3/23/2018	REG	0.0112	0.186	0.193	< 0.1	--	0.000274 J
MW049SA	9/12/2018	REG	0.0116	0.188	0.171	< 0.100 U	--	0.000414 J
MW049SA	4/16/2019	REG	0.0125 J	0.2	0.176	< 0.500 U	--	< 0.0100 U
MW049SA	10/9/2019	REG	0.013	0.246	0.187	0.123	--	0.00393
MW050SA	5/10/2017	REG	0.0081	0.309	0.276	0.00504 J	--	0.0209
MW050SA	9/21/2017	REG	0.00926	0.409 J	0.346	< 0.100 U	--	0.0166
MW050SA	4/3/2018	REG	0.0086	0.287	0.196	< 0.100 U	--	0.0173
MW050SA	4/3/2018	FD	0.00887	0.272	0.184	< 0.100 U	--	0.0164
MW050SA	9/12/2018	REG	0.00822	0.442	0.405	< 0.100 U	--	0.0204
MW050SA	4/15/2019	REG	0.00854	0.329	0.29	< 0.100 U	--	0.0191
MW050SA	10/9/2019	REG	0.00869	0.394	0.355	< 0.100 U	--	0.0158
MW051SA	5/10/2017	REG	0.0114	0.818	0.819	0.00232 J	--	0.000337 J
MW051SA	9/20/2017	REG	0.0119	0.793	0.764	< 0.100 U	--	0.000608 J
MW051SA	4/3/2018	REG	0.012	0.788	0.691	< 0.100 U	--	0.000993 J
MW051SA	9/12/2018	REG	0.0116	0.799	0.668	< 0.100 U	--	0.00236
MW051SA	4/15/2019	REG	0.0126	0.779	0.733	< 0.100 U	--	0.00822
MW051SA	10/10/2019	REG	0.0119	0.699	0.658	0.0345 J	--	0.00252 J
MW052SA	5/10/2017	REG	0.0116	0.207	0.222	0.00339 J	--	0.000376 J
MW052SA	9/20/2017	REG	0.0137	0.239	0.215	0.246	--	0.00892
MW052SA	3/23/2018	REG	0.0135	0.222	0.225	< 0.1	--	0.000710 J
MW052SA	9/12/2018	REG	0.0131	0.242	0.222	< 0.100 U	--	0.000660 J
MW052SA	4/16/2019	REG	0.0138	0.246	0.224	0.11	--	0.00376
MW052SA	10/9/2019	REG	0.0119	0.201	0.239	< 0.100 U	--	0.000382 J
MW054SA	5/10/2017	REG	0.00952	0.122	0.126	0.0113 J	--	0.000350 J
MW054SA	9/20/2017	REG	0.0108	0.132	0.117	< 0.100 U	--	0.000414 J
MW054SA	9/20/2017	FD	0.0103	0.128	0.119	< 0.100 U	--	0.000392 J
MW054SA	3/23/2018	REG	0.011	0.125	0.12	< 0.1	--	< 0.00200 U

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Arsenic	Chromium	Chromium, Hexavalent	Iron	Barium	Manganese
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW054SA	9/12/2018	REG	0.0107	0.131	0.115	0.103	--	0.00315
MW054SA	9/12/2018	FD	0.0108	0.129	0.118	0.0672 J	--	0.00235
MW054SA	4/16/2019	REG	0.0109	0.122	0.117	0.227	--	0.0073
MW054SA	10/9/2019	REG	0.0105	0.117	0.114	< 0.100 U	--	0.000327 J
MW055SA	5/9/2017	REG	0.00647	0.159	0.169	0.00386 J	--	0.000225 J
MW055SA	9/20/2017	REG	0.00754	0.181	0.165	< 0.100 U	--	0.000399 J
MW055SA	3/22/2018	REG	0.00734	0.179	0.154	< 0.1	0.0224	0.000368
MW055SA	9/12/2018	REG	0.00784	0.171	0.166	< 0.100 U	--	0.000439 J
MW055SA	4/12/2019	REG	0.00749	0.177	0.157	< 0.100 U	--	0.000651 J
MW055SA	10/8/2019	REG	0.00745	0.178	0.169	< 0.100 U	--	0.000250 J
MW056SA	5/9/2017	REG	0.0146	0.378	0.348	0.122 J	--	0.000680 J
MW056SA	9/20/2017	REG	0.0149	0.413	0.369	< 0.100 U	--	0.000501 J
MW056SA	4/3/2018	REG	0.0136	0.416	0.401	< 0.100 U	--	0.000495 J
MW056SA	9/12/2018	REG	0.0155	0.417	0.401	0.0257 J	--	0.000575 J
MW056SA	4/17/2019	REG	0.0137	0.382	< 0.0100 U	< 0.200 U	--	0.000420 J
MW056SA	10/9/2019	REG	0.0137	0.33	0.312	0.0830 J	--	0.00116 J
MW057SA	5/9/2017	REG	0.012	0.0247	0.0241	0.0176 J	--	0.000496 J
MW057SA	9/20/2017	REG	0.0121	0.0349	0.0266	0.0947 J	--	0.00413
MW057SA	3/22/2018	REG	0.0125	0.0268	0.0163	< 0.1	0.0649	< 0.002
MW057SA	9/12/2018	REG	0.0127	0.0387	0.0276	< 0.100 U	--	0.000203 J
MW057SA	4/15/2019	REG	0.0124	0.0385	0.0343	0.0850 J	--	0.0034
MW057SA	10/9/2019	REG	0.0118	0.0408	0.0398	0.0797 J	--	0.0029
MW058	5/11/2017	REG	0.0121	2.72	2.48	0.516 J	--	0.00896
MW058	5/11/2017	FD	0.0119	2.85	2.47	0.343 J	--	0.00555
MW058	3/29/2018	REG	0.0124	2.83	2.99	0.0325	--	0.000881 J
MW058	4/12/2019	REG	0.0127	3.16	2.74	< 0.100 U	--	< 0.00200 U
MW058	4/12/2019	FD	0.013	3.25	2.9	< 0.100 U	--	< 0.00200 U
MW059	5/11/2017	REG	0.0118	0.535	0.441	0.0336	--	0.000967 J
MW059	9/21/2017	REG	0.014	0.563 J	0.473	0.0436 J	--	0.000998 J
MW059	3/29/2018	REG	0.0132	0.562	0.448 J	< 0.1	--	0.000366 J
MW059	9/13/2018	REG	0.0141 J	0.556	0.469	< 0.500 U	--	0.00308 J
MW059	4/15/2019	REG	0.0148	0.46	0.401	< 0.100 U	--	0.00107 J
MW059	10/8/2019	REG	0.0136	0.568	0.523	< 0.100 U	--	< 0.00200 U
MW059	10/8/2019	FD	0.0137	0.587	0.524	< 0.100 U	--	< 0.00200 U
MW060	9/22/2017	REG	0.00363	< 0.00400 U	< 0.0100 U	0.639	--	9.71
MW060	3/29/2018	REG	0.0056	< 0.00400 U	< 0.0100 U	1.26	--	9.7
MW060	9/13/2018	REG	0.00342 J	< 0.0200 U	< 0.0100 U	0.765	--	10.5
MW060	4/16/2019	REG	0.00265 J	0.00195 J	< 0.0100 UJ	0.796	--	12.5
MW060	10/9/2019	REG	0.00492	< 0.00400 U	< 0.0100 U	1.86	--	6.47
MW061	5/11/2017	REG	0.0107	1.96	2.13	0.127	--	0.0221
MW061	9/22/2017	REG	0.0119	2.2	1.99	< 0.100 U	--	0.0292
MW061	4/3/2018	REG	0.011	1.68	1.49	< 0.100 U	--	0.0702 J

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Arsenic	Chromium	Chromium, Hexavalent	Iron	Barium	Manganese
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW061	4/3/2018	FD	0.0107	2.11	1.44	< 0.100 U	--	0.0394 J
MW061	9/13/2018	REG	0.0120 J	1.56	1.44	< 0.500 U	--	0.036
MW061	4/16/2019	REG	0.0114	1.38	1.51 J	0.0231 J	--	0.0246
MW061	10/9/2019	REG	0.012	1.2	1.15	< 0.100 U	--	0.0603
MW062A	5/11/2017	REG	0.0214	0.00312 J	< 0.0100 U	0.00369 J	--	0.000214 J
MW062A	5/11/2017	FD	0.0203	0.00336 J	< 0.0100 U	0.0102 J	--	0.000357 J
MW062A	9/21/2017	REG	0.0254	0.00193 J	< 0.0100 U	< 0.100 U	--	0.000262 J
MW062A	3/29/2018	REG	0.0242	0.00207 J	< 0.0100 U	< 0.1	--	0.000335 J
MW062A	9/12/2018	REG	0.024	0.00213 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW062A	4/12/2019	REG	0.0249	0.00200 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW062A	10/8/2019	REG	0.0242	0.00187 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW063A	5/11/2017	REG	0.021	0.00309 J	< 0.0100 U	0.00612 J	--	0.000251 J
MW063A	9/21/2017	REG	0.0248	0.00154 J	< 0.0100 U	< 0.100 U	--	0.000408 J
MW063A	3/29/2018	REG	0.0233	0.00126 J	< 0.0100 U	< 0.1	--	0.000891 J
MW063A	9/12/2018	REG	0.0233	0.00162 J	< 0.0100 U	< 0.100 U	--	0.000592 J
MW063A	4/12/2019	REG	0.0244	0.00160 J	< 0.0100 U	< 0.100 U	--	0.000653 J
MW063A	10/8/2019	REG	0.0249	0.00168 J	< 0.0100 U	< 0.100 U	--	0.000251 J
MW065SA	5/9/2017	REG	0.0101	0.0631	0.0547 J	0.0149 J	--	0.0125
MW065SA	5/9/2017	FD	0.00999	0.0606	0.572 J	0.00336 J	--	0.0121
MW065SA	4/5/2018	REG	0.00851	0.114	0.11	< 0.100 U	--	0.0131
MW065SA	4/11/2019	REG	0.0103	0.0134	0.00690 J	< 0.100 U	--	0.0107
MW066SA	5/9/2017	REG	0.00815	0.094	0.0932	0.0548 J	--	0.298
MW066SA	9/20/2017	REG	0.00898	0.0801	0.0635	< 0.100 U	--	0.0741
MW066SA	3/22/2018	REG	0.00898	0.0387	0.021	< 0.1	0.0325	0.0118
MW066SA	9/12/2018	REG	0.00987	0.0186	0.0137	0.0408 J	--	0.115
MW066SA	4/11/2019	REG	0.00974	0.0179	0.00650 J	0.0678 J	--	0.0699
MW066SA	10/8/2019	REG	0.0108	0.00565	0.00610 J	< 0.100 U	--	0.00819
MW067SA	5/8/2017	REG	0.0169	< 0.00400 U	< 0.0100 U	< 0.0200 U	--	< 0.00200 U
MW067SA	9/20/2017	REG	0.0194	0.000881 J	< 0.0100 U	< 0.100 U	--	0.000652 J
MW067SA	9/20/2017	FD	0.0196	0.00117 J	< 0.0100 U	< 0.100 U	--	0.000925 J
MW068	5/11/2017	REG	0.0193	0.00262 J	< 0.0100 U	0.343	--	3.29
MW068	9/22/2017	REG	0.0163	0.000550 J	< 0.0100 U	0.298	--	2.6
MW068	4/3/2018	REG	0.0148	0.000799 J	< 0.0100 U	0.32	--	2.33 J
MW068	9/13/2018	REG	0.0180 J	< 0.0200 U	< 0.0100 U	0.345 J	--	2.37
MW068	4/15/2019	REG	0.0180 J	< 0.0200 U	< 0.0100 U	1.66	--	2.87
MW068	10/9/2019	REG	0.017	< 0.00400 U	< 0.0100 U	0.362	--	2.01
MW069	5/11/2017	REG	0.0157	0.00188 J	< 0.0100 U	1.35	--	0.72
MW069	9/21/2017	REG	0.0151	< 0.00400 U	< 0.0100 U	0.282	--	0.778
MW069	3/29/2018	REG	0.014	< 0.00400 U	< 0.0100 U	0.456	--	0.78
MW069	9/13/2018	REG	0.0149	< 0.00400 U	< 0.0100 U	0.563	--	0.774
MW069	4/15/2019	REG	0.0113 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.0902
MW069	10/9/2019	REG	0.00906	< 0.00400 U	< 0.0100 U	0.100 J	--	0.293

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Arsenic	Chromium	Chromium, Hexavalent	Iron	Barium	Manganese
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW070	5/11/2017	REG	0.0131	0.00191 J	< 0.0100 U	0.00494 J	--	0.000213 J
MW070	9/21/2017	REG	0.0155	0.000718 J	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW070	3/29/2018	REG	0.0141	< 0.00400 U	< 0.0100 U	< 0.1	--	0.000337 J
MW070	3/29/2018	FD	0.0133	< 0.00400 U	< 0.0100 U	< 0.1	--	0.00149 J
MW070	9/12/2018	REG	0.0145	0.000838 J	< 0.0100 U	< 0.100 U	--	0.000481 J
MW070	4/12/2019	REG	0.0141	< 0.00400 U	< 0.0100 U	0.0443 J	--	0.000935 J
MW070	10/8/2019	REG	0.0138	< 0.00400 U	< 0.0100 U	< 0.100 U	--	< 0.00200 U
MW071SA	5/9/2017	REG	0.00711	0.0076	< 0.0100 U	0.252 J	--	0.389
MW071SA	9/20/2017	REG	0.00923	0.00315 J	< 0.0100 U	0.155	--	0.299
MW071SA	3/22/2018	REG	0.00852	0.00884	< 0.0100 U	< 0.1	0.0624	0.142
MW071SA	9/12/2018	REG	0.00951	0.00142 J	< 0.0100 U	0.100 J	--	0.293
MW071SA	4/11/2019	REG	0.00836	0.00587	< 0.0100 U	0.0284 J	--	0.216
MW071SA	10/8/2019	REG	0.00874	0.000795 J	< 0.0100 U	< 0.100 U	--	0.273
MW071SA	10/8/2019	FD	0.00879	0.00110 J	< 0.0100 U	0.0251 J	--	0.284
MW072SA	5/9/2017	REG	0.0154	0.00268 J	< 0.0100 U	0.00480 J	--	< 0.00200 U
MW072SA	9/20/2017	REG	0.017	0.00101 J	< 0.0100 U	< 0.100 U	--	0.000510 J
MW072SA	3/22/2018	REG	0.0148	0.000617 J	< 0.0100 U	0.0909	0.0246	0.00382
MW072SA	9/12/2018	REG	0.0179	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.000362 J
MW072SA	4/11/2019	REG	0.0186	< 0.00400 U	< 0.0100 U	0.0464 J	--	0.00182 J
MW072SA	10/9/2019	REG	0.0189	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.00204
MW073SA	5/9/2017	REG	0.0112	0.00230 J	< 0.0100 U	0.0147 J	--	0.0112
MW073SA	9/20/2017	REG	0.0128	0.000850 J	< 0.0100	< 0.100 U	--	0.00351
MW073SA	3/22/2018	REG	0.0118	< 0.00400 U	< 0.0100 U	< 0.1	0.0368	0.000798
MW073SA	9/12/2018	REG	0.0112	< 0.00400 U	< 0.0100 U	0.231	--	0.00136 J
MW073SA	4/11/2019	REG	0.0102	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.00344
MW073SA	10/9/2019	REG	0.0119	< 0.00400 U	< 0.0100 U	< 0.100 U	--	0.0104
MW074SA	5/9/2017	REG	0.0122	0.00866	0.00440 J	0.0776 J	--	0.00170 J
MW074SA	9/20/2017	REG	0.0131	0.00754	< 0.0100 U	< 0.100 U	--	0.000218 J
MW074SA	3/22/2018	REG	0.0125	0.00601	< 0.0100 U	< 0.1	0.0288	< 0.002
MW074SA	9/12/2018	REG	0.0152	0.00517	< 0.0100 U	< 0.100 U	--	0.000226 J
MW074SA	4/12/2019	REG	0.0151	0.00508	< 0.0100 U	0.0318 J	--	0.000585 J
MW074SA	10/8/2019	REG	0.0153	0.0058	0.00610 J	< 0.100 U	--	< 0.00200 U
MW075SA	5/8/2017	REG	0.0125	0.0112	0.00840 J	< 0.0200 U	--	< 0.00200 U
MW075SA	9/20/2017	REG	0.0143	0.0135	0.00650 J	< 0.100 U	--	0.000256 J
MW075SA	3/22/2018	REG	0.0123	0.0121	< 0.0100 U	< 0.1	0.0136	< 0.002
MW075SA	9/11/2018	REG	0.0152	0.0135	0.00660 J	< 0.100 U	--	0.000321 J
MW075SA	4/11/2019	REG	0.0134	0.0128	0.00940 J	< 0.100 U	--	0.000224 J
MW075SA	10/8/2019	REG	0.0146	0.0116	0.0113	< 0.100 U	--	< 0.00200 U
MW075SA	10/8/2019	FD	0.0144	0.0117	0.0100 J	< 0.100 U	--	< 0.00200 U
MW076SA	5/8/2017	REG	0.0103	0.012	0.00920 J	< 0.0200 U	--	< 0.00200 U
MW076SA	9/20/2017	REG	0.0119	0.0146	0.00760 J	< 0.100 U	--	0.000882 J
MW076SA	3/22/2018	REG	0.0109	0.0128	0.00300 J	0.0973	0.0222	0.00196

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Arsenic	Chromium	Chromium, Hexavalent	Iron	Barium	Manganese
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW076SA	9/11/2018	REG	0.013	0.0137	0.00580 J	0.0231 J	--	0.000582 J
MW076SA	4/11/2019	REG	0.0123	0.0119	0.0143	0.225	--	0.00388
MW076SA	10/8/2019	REG	0.0126	0.00657	0.00740 J	0.0567 J	--	0.000831 J
MW079SA	5/8/2017	REG	0.00324	< 0.00400 U	< 0.0100 U	0.428	--	0.0566
MW079SA	9/20/2017	REG	0.00748	0.00105 J	< 0.0100 U	0.101	--	0.0251
MW079SA	3/23/2018	REG	0.00663	< 0.00400 U	< 0.0100 U	0.335	--	0.0531
MW079SA	9/12/2018	REG	0.00709	0.000775 J	< 0.0100 U	0.176	--	0.0406
MW079SA	9/12/2018	FD	0.00707	0.000783 J	< 0.0100 U	0.184	--	0.042
MW079SA	4/15/2019	REG	0.00583	0.00103 J	< 0.0100 U	0.581	--	0.0511
MW079SA	10/9/2019	REG	0.00843	< 0.00400 U	< 0.0100 U	0.0585 J	--	0.0218
MW083SA	5/8/2017	REG	0.0115	0.00703	< 0.0100 U	0.867	--	0.0785
MW084SA	5/8/2017	REG	0.0108	0.0328	0.0313	0.0341	--	< 0.00200 U
MW084SA	9/20/2017	REG	0.0098	0.0165	0.0112	< 0.100 U	--	0.00181 J
MW084SA	3/22/2018	REG	0.00734	0.0126	< 0.0100 U	0.324	0.0369	0.0115
MW084SA	9/11/2018	REG	0.00938	0.0168	0.00860 J	< 0.100 U	--	0.0029
MW084SA	4/11/2019	REG	0.00962	0.0205	0.0167	0.415	--	0.0177
MW084SA	10/8/2019	REG	0.00979	0.0208	0.0204	< 0.100 U	--	0.00474
MW085SA	5/8/2017	REG	0.0111	0.0254	0.0244	< 0.0200 U	--	0.00864
MW085SA	9/20/2017	REG	0.0124	0.0293	0.0182	< 0.100 U	--	0.0241
MW085SA	3/22/2018	REG	0.0142	0.0336	0.0126	0.0345	0.0449	0.0332
MW085SA	9/11/2018	REG	0.014	0.0258	0.00280 J	0.177	--	0.115
MW085SA	4/11/2019	REG	0.0141	0.0559	0.0236	0.319	--	0.0265
MW085SA	10/8/2019	REG	0.0128	0.0497	0.0318	0.102	--	0.0167
MW086SA	5/9/2017	REG	0.0103	0.0549	0.00840 J	0.241 J	--	0.00381
MW086SA	9/20/2017	REG	0.0111	0.0475	0.0464	0.515	--	0.0101
MW086SA	3/22/2018	REG	0.00957	0.039	0.0341	0.266	0.0267	0.00512
MW086SA	9/11/2018	REG	0.0123	0.034	0.0255	< 0.100 U	--	0.00153 J
MW086SA	4/11/2019	REG	0.0116	0.0482	0.0385	0.0839 J	--	0.00235
MW086SA	10/8/2019	REG	0.0123	0.0762	0.067	< 0.100 U	--	0.00833
MW087A	5/4/2017	REG	0.00338	0.0478	< 0.0100 U	1.12	--	0.548
MW087A	4/4/2018	REG	0.00115 J	0.0265	< 0.0100 U	1.18	--	0.281
MW087A	4/17/2019	REG	0.00120 J	0.0423	0.00490 J	3.56	--	0.185
MW088M	5/5/2017	REG	0.0235	0.165	< 0.0100 U	0.688	--	0.798
MW088M	9/22/2017	REG	0.0304	0.194	< 0.0100 U	7.5	--	0.931
MW088M	4/4/2018	REG	0.0286	0.164	< 0.0100 U	7.59	--	0.788
MW088M	9/13/2018	REG	0.0234	0.157	< 0.0100 U	1.99	--	0.994
MW088M	4/17/2019	REG	0.0217	0.138	< 0.0100 U	1.72 J	--	1.26
MW088M	10/10/2019	REG	0.0178	0.135	< 0.0100 U	1.98	--	1.40 J
MW089SA	5/4/2017	REG	0.0101	1.15	1.02	< 0.0200 U	--	< 0.00200 U
MW089SA	9/22/2017	REG	0.0112	1.24	1.26	< 0.100 U	--	0.000274 J
MW089SA	4/4/2018	REG	0.0102	1.14	1.02	< 0.100 U	--	0.000901 J
MW089SA	9/14/2018	REG	0.0109	1.18	1.04	< 0.100 U	--	0.000448 J

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Arsenic	Chromium	Chromium, Hexavalent	Iron	Barium	Manganese
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW089SA	4/17/2019	REG	0.0107	1.1	1.06	< 1.00 U	--	0.00835
MW089SA	10/11/2019	REG	0.0103	1.12	1.15	< 0.100 U	--	0.000543 J
MW090	5/4/2017	FD	0.00813	0.187	0.19	< 0.0200 U	--	< 0.00200 U
MW090SA	5/4/2017	REG	0.0094	0.194	0.188	< 0.0200 U	--	< 0.00200 U
MW090SA	4/4/2018	REG	0.00926	0.263	0.258	< 0.100 U	--	0.000541 J
MW090SA	4/17/2019	REG	0.0096	0.265	0.31	< 0.100 U	--	0.000728 J
MW091SA	5/5/2017	REG	0.00905	0.786	0.687	< 0.0200 U	--	< 0.00200 U
MW093SA	9/22/2017	REG	0.00906	0.645	0.702	< 1.00 U	--	0.0478
MW093SA	3/29/2018	REG	0.00826	0.523	0.557	< 0.1	--	0.142
MW093SA	9/14/2018	REG	0.00859	0.494	0.504	< 0.100 U	--	0.019
MW093SA	4/16/2019	REG	0.00811	0.405	0.365	0.0483 J	--	0.244
MW093SA	10/10/2019	REG	0.0092	0.547	0.518	0.0382 J	--	0.121 J
MW093SA	10/10/2019	FD	0.0092	0.563	0.528	0.0313 J	--	0.119 J
MW094	5/11/2017	REG	0.00835	1.62	1.72	0.0465	--	0.0363
MW094	4/3/2018	REG	0.0095	1.74	1.65	< 0.100 U	--	0.0140 J
MW094	4/16/2019	REG	0.0108	1.53	1.88 J	0.134	--	0.0141
MW095	5/11/2017	REG	0.00731	4.07	4.06	0.0336	--	0.0688
MW095	3/29/2018	REG	0.00933	4.15	1.03	< 0.1	--	0.132
MW095	9/13/2018	REG	0.00984 J	3.93	3.62	< 0.500 U	--	0.14
MW095	4/16/2019	REG	0.0093	3.77	3.46 J	0.242	--	0.147
MW095	4/16/2019	FD	0.00823	3.97	3.54	0.239	--	0.126
MW095	10/9/2019	REG	0.00909	3.29	3.02	< 0.100 U	--	0.142
MW095	10/9/2019	FD	0.00914	3.58	3.11 J	< 0.100 U	--	0.141
MW096P	5/4/2017	REG	0.0116	0.0615	0.0162	0.119	--	0.242
MW097P	5/4/2017	REG	0.00811	0.39	0.379	< 0.0200 U	--	0.0722
MW097P	4/4/2018	REG	0.00869	0.385	0.371	< 0.100 U	--	0.0554
MW097P	4/16/2019	REG	0.0111 J	0.479	0.36	< 0.500 U	--	0.0557
MW099	5/11/2017	REG	0.0375	0.00134 J	< 0.0100 U	0.0509 J	--	0.387
MW099	9/21/2017	REG	0.0297	< 0.00400 U	< 0.0100 U	0.0705 J	--	0.322
MW099	3/29/2018	REG	0.0124	< 0.00400 U	< 0.0100 U	0.0835	--	0.262
MW099	3/29/2018	FD	0.012	< 0.00400 U	< 0.0100 U	0.0661	--	0.252
MW099	9/13/2018	REG	0.00898 J	< 0.0200 U	< 0.0100 U	< 0.500 U	--	0.219
MW099	4/12/2019	REG	0.00744	< 0.00400 U	< 0.0100 U	0.0423 J	--	0.18
MW099	10/9/2019	REG	0.01	< 0.00400 U	< 0.0100 U	0.0626 J	--	0.195
MW100	5/9/2017	REG	0.00793	0.00191 J	< 0.0100 U	0.151 J	--	0.184
MW100	5/9/2017	FD	0.00873	0.00209 J	< 0.0100	0.212 J	--	0.246
MW100	9/20/2017	REG	0.0129	0.00223 J	< 0.0100 U	0.528	--	0.124
MW100	9/20/2017	FD	0.0139	0.00125 J	< 0.0100 U	0.426	--	0.116
MW100	3/22/2018	REG	0.00858	< 0.00400 U	< 0.0100 U	0.0727	0.0385	0.172
MW100	9/11/2018	REG	0.00935	< 0.00400 U	< 0.0100 U	0.0583 J	--	0.253
MW100	9/11/2018	FD	0.00906	< 0.00400 U	< 0.0100 U	0.0569 J	--	0.223
MW100	4/11/2019	REG	0.0106	0.00733	< 0.0100 U	0.36	--	0.299

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Arsenic	Chromium	Chromium, Hexavalent	Iron	Barium	Manganese
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose						
NMWQCC Domestic			0.1 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	2 mg/L	0.2 mg/L
MW100	4/11/2019	FD	0.0106	0.00692	< 0.0100 U	0.345	--	0.303
MW100	10/8/2019	REG	0.00952	0.000802 J	< 0.0100 U	0.0928 J	--	0.27
MW70A	5/11/2017	REG	0.0182	0.00348 J	< 0.0100 U	0.00351 J	--	0.000259 J
RW003	5/5/2017	REG	0.0792	< 0.00400 U	< 0.0100 U	38.7	--	1.21
RW004A	5/4/2017	REG	0.036	0.0285	< 0.0100 U	23.1	--	0.274
Teague	5/11/2017	REG	0.00457	0.00844	< 0.0100 U	0.0466 J	--	0.0185
Trip Blank	5/5/2017	TB	--	--	--	--	--	--
Trip Blank	5/9/2017	TB	--	--	--	--	--	--
Trip Blank	5/10/2017	TB	--	--	--	--	--	--
Trip Blank	5/11/2017	TB	--	--	--	--	--	--
WoodellWW	5/11/2017	REG	0.0095	0.115	0.113	0.0826 J	--	0.000684 J

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
IW001	5/5/2017	REG	--	--	--	--	--
IW002	5/5/2017	REG	--	--	--	--	--
IW003	5/8/2017	REG	--	--	--	--	--
IW003	3/22/2018	REG	--	--	--	--	--
IW003	4/15/2019	REG	--	--	--	--	--
IW004	5/8/2017	REG	--	--	--	--	--
IW005	5/8/2017	REG	--	--	--	--	--
IW006	5/8/2017	REG	--	--	--	--	--
IW007	5/8/2017	REG	--	--	--	--	--
IW008	5/8/2017	REG	--	--	--	--	--
IW008	5/8/2017	FD	--	--	--	--	--
IW008	3/22/2018	REG	--	--	--	--	--
IW008	4/12/2019	REG	--	--	--	--	--
IW010	5/8/2017	REG	--	--	--	--	--
IW010	3/22/2018	REG	--	--	--	--	--
IW010	4/12/2019	REG	--	--	--	--	--
IW011	5/8/2017	REG	--	--	--	--	--
IW012	5/8/2017	REG	--	--	--	--	--
IW013	5/8/2017	REG	--	--	--	--	--
IW014	5/8/2017	REG	--	--	--	--	--
IW015	5/8/2017	REG	--	--	--	--	--
IW016	5/8/2017	REG	--	--	--	--	--
IW019	5/5/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW019	9/26/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW019	4/4/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW019	9/11/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW019	4/16/2019	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW019	4/16/2019	FD	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW019	10/10/2019	REG	< 0.002 U	< 0.002 U	< 0.002 UJ	< 0.002 U	< 2.12 U
IW021	5/5/2017	REG	--	--	--	--	--
IW022	5/5/2017	REG	--	--	--	--	--
IW023	5/5/2017	REG	--	--	--	--	--
IW023	9/22/2017	REG	--	--	--	--	--
IW023	3/29/2018	REG	--	--	--	--	--
IW023	9/14/2018	REG	--	--	--	--	--
IW023	9/14/2018	FD	--	--	--	--	--
IW023	4/16/2019	REG	--	--	--	--	--
IW023	10/10/2019	REG	--	--	--	--	--
IW024	5/4/2017	REG	--	--	--	--	--
IW024	4/4/2018	REG	--	--	--	--	--
IW024	4/16/2019	REG	--	--	--	--	--
IW025	5/4/2017	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
IW026	5/4/2017	REG	--	--	--	--	--
IW027	5/4/2017	REG	--	--	--	--	--
IW028	5/4/2017	REG	--	--	--	--	--
IW029P	5/11/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
IW029P	5/11/2017	FD	< 0.002 U	< 0.002 U	< 0.002 U	0.00866	< 1.50 U
LordWW	5/11/2017	REG	--	--	--	--	--
MW001	5/10/2017	REG	< 0.002 U	< 0.002 U	0.0364	< 0.002 U	< 1.50 U
MW001	5/10/2017	FD	< 0.002 U	< 0.002 U	0.0315	< 0.002 U	< 1.50 U
MW001	9/26/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW001	4/4/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW001	9/11/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW001	4/17/2019	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW001	10/10/2019	REG	< 0.002 U	< 0.002 U	< 0.002 UJ	< 0.002 U	< 2.14 U
MW002	5/9/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW002A	5/9/2017	REG	--	--	--	--	--
MW002A	9/22/2017	REG	--	--	--	--	--
MW002A	4/4/2018	REG	--	--	--	--	--
MW002A	9/14/2018	REG	--	--	--	--	--
MW002A	4/17/2019	REG	--	--	--	--	--
MW002A	10/10/2019	REG	--	--	--	--	--
MW002A	10/10/2019	FD	--	--	--	--	--
MW003	5/4/2017	REG	--	--	--	--	--
MW004	5/5/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW004	5/5/2017	FD	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW004A	5/5/2017	REG	--	--	--	--	--
MW004A	9/22/2017	REG	--	--	--	--	--
MW004A	4/4/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW004A	9/14/2018	REG	--	--	--	--	--
MW004A	4/16/2019	REG	--	--	--	--	--
MW004A	10/11/2019	REG	--	--	--	--	--
MW007	5/4/2017	REG	--	--	--	--	--
MW007A	5/4/2017	REG	--	--	--	--	--
MW007A	9/22/2017	REG	--	--	--	--	--
MW007A	4/4/2018	REG	--	--	--	--	--
MW007A	9/14/2018	REG	--	--	--	--	--
MW007A	4/17/2019	REG	--	--	--	--	--
MW007A	10/11/2019	REG	--	--	--	--	--
MW008	5/4/2017	REG	--	--	--	--	--
MW008A	5/4/2017	REG	--	--	--	--	--
MW008M	5/4/2017	REG	--	--	--	--	--
MW008M	9/22/2017	REG	--	--	--	--	--
MW008M	4/4/2018	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW008M	4/4/2018	FD	--	--	--	--	--
MW008M	9/14/2018	REG	--	--	--	--	--
MW008M	4/17/2019	REG	--	--	--	--	--
MW008M	10/10/2019	REG	--	--	--	--	--
MW009	5/4/2017	REG	--	--	--	--	--
MW009A	5/4/2017	REG	--	--	--	--	--
MW010	5/9/2017	REG	--	--	--	--	--
MW010	9/21/2017	REG	--	--	--	--	--
MW010	4/2/2018	REG	--	--	--	--	--
MW010	9/13/2018	REG	--	--	--	--	--
MW010	4/16/2019	REG	--	--	--	--	--
MW010	10/10/2019	REG	--	--	--	--	--
MW010	10/10/2019	FD	--	--	--	--	--
MW011	5/5/2017	REG	--	--	--	--	--
MW011A	5/5/2017	REG	--	--	--	--	--
MW011A	9/22/2017	REG	--	--	--	--	--
MW011A	9/22/2017	FD	--	--	--	--	--
MW011A	4/4/2018	REG	--	--	--	--	--
MW011A	9/14/2018	REG	--	--	--	--	--
MW011A	9/14/2018	FD	--	--	--	--	--
MW011A	4/17/2019	REG	--	--	--	--	--
MW011A	10/10/2019	REG	--	--	--	--	--
MW011M	5/5/2017	REG	--	--	--	--	--
MW012	5/5/2017	REG	--	--	--	--	--
MW012A	5/5/2017	REG	--	--	--	--	--
MW012M	5/5/2017	REG	--	--	--	--	--
MW012M	4/4/2018	REG	--	--	--	--	--
MW012M	4/17/2019	REG	--	--	--	--	--
MW013	5/9/2017	REG	--	--	--	--	--
MW013	9/21/2017	REG	--	--	--	--	--
MW013	4/2/2018	REG	--	--	--	--	--
MW013	9/13/2018	REG	--	--	--	--	--
MW013	4/16/2019	REG	--	--	--	--	--
MW013	10/10/2019	REG	--	--	--	--	--
MW013A	5/11/2017	REG	--	--	--	--	--
MW015	5/11/2017	REG	--	--	--	--	--
MW015A	5/11/2017	REG	--	--	--	--	--
MW015A	9/22/2017	REG	--	--	--	--	--
MW015A	4/2/2018	REG	--	--	--	--	--
MW015A	4/2/2018	FD	--	--	--	--	--
MW015A	9/13/2018	REG	--	--	--	--	--
MW015A	4/16/2019	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW015A	10/9/2019	REG	--	--	--	--	--
MW016A	9/14/2018	REG	--	--	--	--	--
MW018	5/10/2017	REG	--	--	--	--	--
MW018	9/21/2017	REG	--	--	--	--	--
MW018	4/2/2018	REG	--	--	--	--	--
MW018	4/2/2018	FD	--	--	--	--	--
MW018	9/13/2018	REG	--	--	--	--	--
MW018	4/16/2019	REG	--	--	--	--	--
MW018	10/9/2019	REG	--	--	--	--	--
MW019A	5/10/2017	REG	--	--	--	--	--
MW019A	9/21/2017	REG	--	--	--	--	--
MW019A	4/2/2018	REG	--	--	--	--	--
MW019A	9/13/2018	REG	--	--	--	--	--
MW019A	4/16/2019	REG	--	--	--	--	--
MW019A	10/9/2019	REG	--	--	--	--	--
MW020	5/11/2017	REG	--	--	--	--	--
MW020A	5/11/2017	REG	--	--	--	--	--
MW020A	9/21/2017	REG	--	--	--	--	--
MW020A	4/2/2018	REG	--	--	--	--	--
MW020A	9/13/2018	REG	--	--	--	--	--
MW020A	4/16/2019	REG	--	--	--	--	--
MW020A	4/16/2019	FD	--	--	--	--	--
MW020A	10/9/2019	REG	--	--	--	--	--
MW021A	5/10/2017	REG	--	--	--	--	--
MW021A	9/22/2017	REG	--	--	--	--	--
MW021A	4/3/2018	REG	--	--	--	--	--
MW021A	9/12/2018	REG	--	--	--	--	--
MW021A	4/12/2019	REG	--	--	--	--	--
MW021A	10/10/2019	REG	--	--	--	--	--
MW023	5/11/2017	REG	--	--	--	--	--
MW023	9/21/2017	REG	--	--	--	--	--
MW023	3/29/2018	REG	--	--	--	--	--
MW023	9/13/2018	REG	--	--	--	--	--
MW023	4/15/2019	REG	--	--	--	--	--
MW023	10/8/2019	REG	--	--	--	--	--
MW023A	5/11/2017	REG	--	--	--	--	--
MW024	5/11/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW024A	5/11/2017	REG	--	--	--	--	--
MW024A	9/21/2017	REG	--	--	--	--	--
MW024A	9/21/2017	FD	--	--	--	--	--
MW024A	3/29/2018	REG	--	--	--	--	--
MW024A	9/12/2018	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW024A	9/12/2018	FD	--	--	--	--	--
MW024A	4/12/2019	REG	--	--	--	--	--
MW024A	10/8/2019	REG	--	--	--	--	--
MW026	9/22/2017	REG	--	--	--	--	--
MW026	4/5/2018	REG	--	--	--	--	--
MW026	9/13/2018	REG	--	--	--	--	--
MW026	4/16/2019	REG	--	--	--	--	--
MW026	10/11/2019	REG	--	--	--	--	--
MW027	5/11/2017	REG	--	--	--	--	--
MW027	9/22/2017	REG	--	--	--	--	--
MW027	4/3/2018	REG	--	--	--	--	--
MW027	9/13/2018	REG	--	--	--	--	--
MW027	4/16/2019	REG	--	--	--	--	--
MW027	10/9/2019	REG	--	--	--	--	--
MW030	5/11/2017	REG	--	--	--	--	--
MW030	9/21/2017	REG	--	--	--	--	--
MW030	3/29/2018	REG	--	--	--	--	--
MW030	9/13/2018	REG	--	--	--	--	--
MW030	4/12/2019	REG	--	--	--	--	--
MW030	10/8/2019	REG	--	--	--	--	--
MW030P	5/4/2017	REG	--	--	--	--	--
MW031	5/11/2017	REG	--	--	--	--	--
MW031	9/21/2017	REG	--	--	--	--	--
MW031	3/29/2018	REG	--	--	--	--	--
MW031	9/13/2018	REG	--	--	--	--	--
MW031	4/15/2019	REG	--	--	--	--	--
MW031	10/9/2019	REG	--	--	--	--	--
MW031	10/9/2019	FD	--	--	--	--	--
MW032	9/22/2017	REG	--	--	--	--	--
MW032	4/3/2018	REG	--	--	--	--	--
MW032	9/13/2018	REG	--	--	--	--	--
MW032	4/16/2019	REG	--	--	--	--	--
MW032	4/16/2019	FD	--	--	--	--	--
MW032	10/9/2019	REG	--	--	--	--	--
MW034	5/5/2017	REG	--	--	--	--	--
MW036	5/9/2017	REG	0.407	< 0.01 U	0.588	0.0411	4.41
MW037	5/9/2017	REG	0.0572	< 0.002 U	0.0422	< 0.002 U	1.76
MW037	9/26/2017	REG	0.252	0.00271	0.173	< 0.002 U	< 1.50 U
MW037	4/4/2018	REG	0.0225	0.0006 J	0.00974	< 0.002 U	< 1.50 U
MW037	4/4/2018	FD	0.0254	< 0.002 U	0.0116	< 0.002 U	< 1.50 U
MW037	9/11/2018	REG	0.0719	< 0.002 U	0.0108	0.00977	< 1.50 U
MW037	4/16/2019	REG	0.719 D	0.00039 J	0.134	0.00272	3.22

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW037	10/10/2019	REG	0.0926	< 0.002 U	0.0136 J	< 0.002 U	1.37 J
MW038	5/9/2017	REG	0.00943	< 0.002 U	0.00296	< 0.002 U	< 1.50 U
MW038	5/9/2017	FD	0.00799	< 0.002 U	< 0.002 U	< 0.002 U	1.04 J
MW040A	5/9/2017	REG	--	--	--	--	--
MW040A	9/21/2017	REG	--	--	--	--	--
MW040A	4/2/2018	REG	--	--	--	--	--
MW040A	9/13/2018	REG	--	--	--	--	--
MW040A	4/16/2019	REG	--	--	--	--	--
MW040A	10/10/2019	REG	--	--	--	--	--
MW041A	5/5/2017	REG	--	--	--	--	--
MW041A	9/21/2017	REG	--	--	--	--	--
MW041A	3/29/2018	REG	--	--	--	--	--
MW041A	9/12/2018	REG	--	--	--	--	--
MW041A	4/16/2019	REG	--	--	--	--	--
MW041A	10/9/2019	REG	--	--	--	--	--
MW042A	5/9/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW043	5/9/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	0.987 J
MW043	9/26/2017	FD	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW043	9/26/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW043	4/3/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	0.00087 J	< 1.50 U
MW043	9/11/2018	REG	< 0.002 UJ	< 0.002 UJ	< 0.002 UJ	0.00347 J	< 1.50 U
MW043	9/11/2018	FD	< 0.002 U	< 0.002 U	< 0.002 U	0.00319	< 1.50 U
MW043	4/15/2019	REG	< 0.002 U	< 0.002 U	< 0.002 U	0.00234	< 1.50 U
MW043	10/10/2019	REG	< 0.002 U	< 0.002 U	< 0.002 UJ	< 0.002 U	1.12 J
MW044	5/9/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW044	4/4/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	5/9/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	9/26/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	4/5/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	4/5/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	4/5/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	9/11/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	4/17/2019	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	4/17/2019	FD	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW045	10/10/2019	REG	< 0.002 U	< 0.002 U	< 0.002 UJ	< 0.002 U	< 2.20 U
MW046	5/9/2017	REG	0.063	< 0.002 U	0.12	0.0177	2.09
MW046A	5/9/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW046A	9/26/2017	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW046A	4/4/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW046A	9/11/2018	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW046A	4/17/2019	REG	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 1.50 U
MW046A	10/10/2019	REG	< 0.002 U	< 0.002 U	< 0.002 UJ	< 0.002 U	< 2.16 U

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW047	5/10/2017	REG	--	--	--	--	--
MW047	9/22/2017	REG	--	--	--	--	--
MW047	4/4/2018	REG	--	--	--	--	--
MW047	9/14/2018	REG	--	--	--	--	--
MW047	4/17/2019	REG	--	--	--	--	--
MW047	10/11/2019	REG	--	--	--	--	--
MW048SA	5/5/2017	REG	--	--	--	--	--
MW048SA	5/5/2017	FD	--	--	--	--	--
MW048SA	9/20/2017	REG	--	--	--	--	--
MW048SA	3/23/2018	REG	--	--	--	--	--
MW048SA	9/12/2018	REG	--	--	--	--	--
MW048SA	4/16/2019	REG	--	--	--	--	--
MW048SA	10/9/2019	REG	--	--	--	--	--
MW049SA	5/5/2017	REG	--	--	--	--	--
MW049SA	9/20/2017	REG	--	--	--	--	--
MW049SA	3/23/2018	REG	--	--	--	--	--
MW049SA	9/12/2018	REG	--	--	--	--	--
MW049SA	4/16/2019	REG	--	--	--	--	--
MW049SA	10/9/2019	REG	--	--	--	--	--
MW050SA	5/10/2017	REG	--	--	--	--	--
MW050SA	9/21/2017	REG	--	--	--	--	--
MW050SA	4/3/2018	REG	--	--	--	--	--
MW050SA	4/3/2018	FD	--	--	--	--	--
MW050SA	9/12/2018	REG	--	--	--	--	--
MW050SA	4/15/2019	REG	--	--	--	--	--
MW050SA	10/9/2019	REG	--	--	--	--	--
MW051SA	5/10/2017	REG	--	--	--	--	--
MW051SA	9/20/2017	REG	--	--	--	--	--
MW051SA	4/3/2018	REG	--	--	--	--	--
MW051SA	9/12/2018	REG	--	--	--	--	--
MW051SA	4/15/2019	REG	--	--	--	--	--
MW051SA	10/10/2019	REG	--	--	--	--	--
MW052SA	5/10/2017	REG	--	--	--	--	--
MW052SA	9/20/2017	REG	--	--	--	--	--
MW052SA	3/23/2018	REG	--	--	--	--	--
MW052SA	9/12/2018	REG	--	--	--	--	--
MW052SA	4/16/2019	REG	--	--	--	--	--
MW052SA	10/9/2019	REG	--	--	--	--	--
MW054SA	5/10/2017	REG	--	--	--	--	--
MW054SA	9/20/2017	REG	--	--	--	--	--
MW054SA	9/20/2017	FD	--	--	--	--	--
MW054SA	3/23/2018	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW054SA	9/12/2018	REG	--	--	--	--	--
MW054SA	9/12/2018	FD	--	--	--	--	--
MW054SA	4/16/2019	REG	--	--	--	--	--
MW054SA	10/9/2019	REG	--	--	--	--	--
MW055SA	5/9/2017	REG	--	--	--	--	--
MW055SA	9/20/2017	REG	--	--	--	--	--
MW055SA	3/22/2018	REG	--	--	--	--	--
MW055SA	9/12/2018	REG	--	--	--	--	--
MW055SA	4/12/2019	REG	--	--	--	--	--
MW055SA	10/8/2019	REG	--	--	--	--	--
MW056SA	5/9/2017	REG	--	--	--	--	--
MW056SA	9/20/2017	REG	--	--	--	--	--
MW056SA	4/3/2018	REG	--	--	--	--	--
MW056SA	9/12/2018	REG	--	--	--	--	--
MW056SA	4/17/2019	REG	--	--	--	--	--
MW056SA	10/9/2019	REG	--	--	--	--	--
MW057SA	5/9/2017	REG	--	--	--	--	--
MW057SA	9/20/2017	REG	--	--	--	--	--
MW057SA	3/22/2018	REG	--	--	--	--	--
MW057SA	9/12/2018	REG	--	--	--	--	--
MW057SA	4/15/2019	REG	--	--	--	--	--
MW057SA	10/9/2019	REG	--	--	--	--	--
MW058	5/11/2017	REG	--	--	--	--	--
MW058	5/11/2017	FD	--	--	--	--	--
MW058	3/29/2018	REG	--	--	--	--	--
MW058	4/12/2019	REG	--	--	--	--	--
MW058	4/12/2019	FD	--	--	--	--	--
MW059	5/11/2017	REG	--	--	--	--	--
MW059	9/21/2017	REG	--	--	--	--	--
MW059	3/29/2018	REG	--	--	--	--	--
MW059	9/13/2018	REG	--	--	--	--	--
MW059	4/15/2019	REG	--	--	--	--	--
MW059	10/8/2019	REG	--	--	--	--	--
MW059	10/8/2019	FD	--	--	--	--	--
MW060	9/22/2017	REG	--	--	--	--	--
MW060	3/29/2018	REG	--	--	--	--	--
MW060	9/13/2018	REG	--	--	--	--	--
MW060	4/16/2019	REG	--	--	--	--	--
MW060	10/9/2019	REG	--	--	--	--	--
MW061	5/11/2017	REG	--	--	--	--	--
MW061	9/22/2017	REG	--	--	--	--	--
MW061	4/3/2018	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW061	4/3/2018	FD	--	--	--	--	--
MW061	9/13/2018	REG	--	--	--	--	--
MW061	4/16/2019	REG	--	--	--	--	--
MW061	10/9/2019	REG	--	--	--	--	--
MW062A	5/11/2017	REG	--	--	--	--	--
MW062A	5/11/2017	FD	--	--	--	--	--
MW062A	9/21/2017	REG	--	--	--	--	--
MW062A	3/29/2018	REG	--	--	--	--	--
MW062A	9/12/2018	REG	--	--	--	--	--
MW062A	4/12/2019	REG	--	--	--	--	--
MW062A	10/8/2019	REG	--	--	--	--	--
MW063A	5/11/2017	REG	--	--	--	--	--
MW063A	9/21/2017	REG	--	--	--	--	--
MW063A	3/29/2018	REG	--	--	--	--	--
MW063A	9/12/2018	REG	--	--	--	--	--
MW063A	4/12/2019	REG	--	--	--	--	--
MW063A	10/8/2019	REG	--	--	--	--	--
MW065SA	5/9/2017	REG	--	--	--	--	--
MW065SA	5/9/2017	FD	--	--	--	--	--
MW065SA	4/5/2018	REG	--	--	--	--	--
MW065SA	4/11/2019	REG	--	--	--	--	--
MW066SA	5/9/2017	REG	--	--	--	--	--
MW066SA	9/20/2017	REG	--	--	--	--	--
MW066SA	3/22/2018	REG	--	--	--	--	--
MW066SA	9/12/2018	REG	--	--	--	--	--
MW066SA	4/11/2019	REG	--	--	--	--	--
MW066SA	10/8/2019	REG	--	--	--	--	--
MW067SA	5/8/2017	REG	--	--	--	--	--
MW067SA	9/20/2017	REG	--	--	--	--	--
MW067SA	9/20/2017	FD	--	--	--	--	--
MW068	5/11/2017	REG	--	--	--	--	--
MW068	9/22/2017	REG	--	--	--	--	--
MW068	4/3/2018	REG	--	--	--	--	--
MW068	9/13/2018	REG	--	--	--	--	--
MW068	4/15/2019	REG	--	--	--	--	--
MW068	10/9/2019	REG	--	--	--	--	--
MW069	5/11/2017	REG	--	--	--	--	--
MW069	9/21/2017	REG	--	--	--	--	--
MW069	3/29/2018	REG	--	--	--	--	--
MW069	9/13/2018	REG	--	--	--	--	--
MW069	4/15/2019	REG	--	--	--	--	--
MW069	10/9/2019	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW070	5/11/2017	REG	--	--	--	--	--
MW070	9/21/2017	REG	--	--	--	--	--
MW070	3/29/2018	REG	--	--	--	--	--
MW070	3/29/2018	FD	--	--	--	--	--
MW070	9/12/2018	REG	--	--	--	--	--
MW070	4/12/2019	REG	--	--	--	--	--
MW070	10/8/2019	REG	--	--	--	--	--
MW071SA	5/9/2017	REG	--	--	--	--	--
MW071SA	9/20/2017	REG	--	--	--	--	--
MW071SA	3/22/2018	REG	--	--	--	--	--
MW071SA	9/12/2018	REG	--	--	--	--	--
MW071SA	4/11/2019	REG	--	--	--	--	--
MW071SA	10/8/2019	REG	--	--	--	--	--
MW071SA	10/8/2019	FD	--	--	--	--	--
MW072SA	5/9/2017	REG	--	--	--	--	--
MW072SA	9/20/2017	REG	--	--	--	--	--
MW072SA	3/22/2018	REG	--	--	--	--	--
MW072SA	9/12/2018	REG	--	--	--	--	--
MW072SA	4/11/2019	REG	--	--	--	--	--
MW072SA	10/9/2019	REG	--	--	--	--	--
MW073SA	5/9/2017	REG	--	--	--	--	--
MW073SA	9/20/2017	REG	--	--	--	--	--
MW073SA	3/22/2018	REG	--	--	--	--	--
MW073SA	9/12/2018	REG	--	--	--	--	--
MW073SA	4/11/2019	REG	--	--	--	--	--
MW073SA	10/9/2019	REG	--	--	--	--	--
MW074SA	5/9/2017	REG	--	--	--	--	--
MW074SA	9/20/2017	REG	--	--	--	--	--
MW074SA	3/22/2018	REG	--	--	--	--	--
MW074SA	9/12/2018	REG	--	--	--	--	--
MW074SA	4/12/2019	REG	--	--	--	--	--
MW074SA	10/8/2019	REG	--	--	--	--	--
MW075SA	5/8/2017	REG	--	--	--	--	--
MW075SA	9/20/2017	REG	--	--	--	--	--
MW075SA	3/22/2018	REG	--	--	--	--	--
MW075SA	9/11/2018	REG	--	--	--	--	--
MW075SA	4/11/2019	REG	--	--	--	--	--
MW075SA	10/8/2019	REG	--	--	--	--	--
MW075SA	10/8/2019	FD	--	--	--	--	--
MW076SA	5/8/2017	REG	--	--	--	--	--
MW076SA	9/20/2017	REG	--	--	--	--	--
MW076SA	3/22/2018	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW076SA	9/11/2018	REG	--	--	--	--	--
MW076SA	4/11/2019	REG	--	--	--	--	--
MW076SA	10/8/2019	REG	--	--	--	--	--
MW079SA	5/8/2017	REG	--	--	--	--	--
MW079SA	9/20/2017	REG	--	--	--	--	--
MW079SA	3/23/2018	REG	--	--	--	--	--
MW079SA	9/12/2018	REG	--	--	--	--	--
MW079SA	9/12/2018	FD	--	--	--	--	--
MW079SA	4/15/2019	REG	--	--	--	--	--
MW079SA	10/9/2019	REG	--	--	--	--	--
MW083SA	5/8/2017	REG	--	--	--	--	--
MW084SA	5/8/2017	REG	--	--	--	--	--
MW084SA	9/20/2017	REG	--	--	--	--	--
MW084SA	3/22/2018	REG	--	--	--	--	--
MW084SA	9/11/2018	REG	--	--	--	--	--
MW084SA	4/11/2019	REG	--	--	--	--	--
MW084SA	10/8/2019	REG	--	--	--	--	--
MW085SA	5/8/2017	REG	--	--	--	--	--
MW085SA	9/20/2017	REG	--	--	--	--	--
MW085SA	3/22/2018	REG	--	--	--	--	--
MW085SA	9/11/2018	REG	--	--	--	--	--
MW085SA	4/11/2019	REG	--	--	--	--	--
MW085SA	10/8/2019	REG	--	--	--	--	--
MW086SA	5/9/2017	REG	--	--	--	--	--
MW086SA	9/20/2017	REG	--	--	--	--	--
MW086SA	3/22/2018	REG	--	--	--	--	--
MW086SA	9/11/2018	REG	--	--	--	--	--
MW086SA	4/11/2019	REG	--	--	--	--	--
MW086SA	10/8/2019	REG	--	--	--	--	--
MW087A	5/4/2017	REG	--	--	--	--	--
MW087A	4/4/2018	REG	--	--	--	--	--
MW087A	4/17/2019	REG	--	--	--	--	--
MW088M	5/5/2017	REG	--	--	--	--	--
MW088M	9/22/2017	REG	--	--	--	--	--
MW088M	4/4/2018	REG	--	--	--	--	--
MW088M	9/13/2018	REG	--	--	--	--	--
MW088M	4/17/2019	REG	--	--	--	--	--
MW088M	10/10/2019	REG	--	--	--	--	--
MW089SA	5/4/2017	REG	--	--	--	--	--
MW089SA	9/22/2017	REG	--	--	--	--	--
MW089SA	4/4/2018	REG	--	--	--	--	--
MW089SA	9/14/2018	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW089SA	4/17/2019	REG	--	--	--	--	--
MW089SA	10/11/2019	REG	--	--	--	--	--
MW090	5/4/2017	FD	--	--	--	--	--
MW090SA	5/4/2017	REG	--	--	--	--	--
MW090SA	4/4/2018	REG	--	--	--	--	--
MW090SA	4/17/2019	REG	--	--	--	--	--
MW091SA	5/5/2017	REG	--	--	--	--	--
MW093SA	9/22/2017	REG	--	--	--	--	--
MW093SA	3/29/2018	REG	--	--	--	--	--
MW093SA	9/14/2018	REG	--	--	--	--	--
MW093SA	4/16/2019	REG	--	--	--	--	--
MW093SA	10/10/2019	REG	--	--	--	--	--
MW093SA	10/10/2019	FD	--	--	--	--	--
MW094	5/11/2017	REG	--	--	--	--	--
MW094	4/3/2018	REG	--	--	--	--	--
MW094	4/16/2019	REG	--	--	--	--	--
MW095	5/11/2017	REG	--	--	--	--	--
MW095	3/29/2018	REG	--	--	--	--	--
MW095	9/13/2018	REG	--	--	--	--	--
MW095	4/16/2019	REG	--	--	--	--	--
MW095	4/16/2019	FD	--	--	--	--	--
MW095	10/9/2019	REG	--	--	--	--	--
MW095	10/9/2019	FD	--	--	--	--	--
MW096P	5/4/2017	REG	--	--	--	--	--
MW097P	5/4/2017	REG	--	--	--	--	--
MW097P	4/4/2018	REG	--	--	--	--	--
MW097P	4/16/2019	REG	--	--	--	--	--
MW099	5/11/2017	REG	--	--	--	--	--
MW099	9/21/2017	REG	--	--	--	--	--
MW099	3/29/2018	REG	--	--	--	--	--
MW099	3/29/2018	FD	--	--	--	--	--
MW099	9/13/2018	REG	--	--	--	--	--
MW099	4/12/2019	REG	--	--	--	--	--
MW099	10/9/2019	REG	--	--	--	--	--
MW100	5/9/2017	REG	--	--	--	--	--
MW100	5/9/2017	FD	--	--	--	--	--
MW100	9/20/2017	REG	--	--	--	--	--
MW100	9/20/2017	FD	--	--	--	--	--
MW100	3/22/2018	REG	--	--	--	--	--
MW100	9/11/2018	REG	--	--	--	--	--
MW100	9/11/2018	FD	--	--	--	--	--
MW100	4/11/2019	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			Benzene	Toluene	Ethylbenzene	Xylene (total)	Petroleum Hydrocarbons (C6-C10)-GRO
Report Units			mg/L	mg/L	mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose					
NMWQCC Domestic			0.005 mg/L	1 mg/L	0.7 mg/L	0.62 mg/L	--
MW100	4/11/2019	FD	--	--	--	--	--
MW100	10/8/2019	REG	--	--	--	--	--
MW70A	5/11/2017	REG	--	--	--	--	--
RW003	5/5/2017	REG	--	--	--	--	--
RW004A	5/4/2017	REG	--	--	--	--	--
Teague	5/11/2017	REG	--	--	--	--	--
Trip Blank	5/5/2017	TB	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	--
Trip Blank	5/9/2017	TB	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	--
Trip Blank	5/10/2017	TB	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	--
Trip Blank	5/11/2017	TB	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	--
WoodellWW	5/11/2017	REG	--	--	--	--	--

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
IW001	5/5/2017	REG	--	1,030	4,350
IW002	5/5/2017	REG	--	526	2,960
IW003	5/8/2017	REG	--	1,090	2,600
IW003	3/22/2018	REG	--	999	2,200
IW003	4/15/2019	REG	--	1,130	2,410
IW004	5/8/2017	REG	--	1,000	2,620
IW005	5/8/2017	REG	--	822	2,400
IW006	5/8/2017	REG	--	741	2,150
IW007	5/8/2017	REG	--	893	2,570
IW008	5/8/2017	REG	--	608	1,900
IW008	5/8/2017	FD	--	584	1,710
IW008	3/22/2018	REG	--	707	2,060
IW008	4/12/2019	REG	--	875	2,160
IW010	5/8/2017	REG	--	913	3,080
IW010	3/22/2018	REG	--	906	2,940
IW010	4/12/2019	REG	--	2,280	3,120
IW011	5/8/2017	REG	--	993	2,780
IW012	5/8/2017	REG	--	952	3,320
IW013	5/8/2017	REG	--	2,180	5,430
IW014	5/8/2017	REG	--	1,400	3,380
IW015	5/8/2017	REG	--	948	2,460
IW016	5/8/2017	REG	--	328	1,270
IW019	5/5/2017	REG	< 1.50 U	1,070	2,540
IW019	9/26/2017	REG	< 1.50 U	1,000	4,380
IW019	4/4/2018	REG	< 1.50 U	1,070	3,190
IW019	9/11/2018	REG	< 1.50 U	1,060	3,270
IW019	4/16/2019	REG	< 1.50 U	1,130 J	3,310
IW019	4/16/2019	FD	< 1.50 U	361 J	3,190
IW019	10/10/2019	REG	< 2.12 U	1,120	3,770
IW021	5/5/2017	REG	--	855	3,740
IW022	5/5/2017	REG	--	739	3,070
IW023	5/5/2017	REG	--	729	2,900
IW023	9/22/2017	REG	--	631	2,990
IW023	3/29/2018	REG	--	644	2,760
IW023	9/14/2018	REG	--	645	2,790
IW023	9/14/2018	FD	--	638	2,880
IW023	4/16/2019	REG	--	765 J	2,790
IW023	10/10/2019	REG	--	33.3	3,040
IW024	5/4/2017	REG	--	871	3,960
IW024	4/4/2018	REG	--	920	3,450
IW024	4/16/2019	REG	--	817	4,350
IW025	5/4/2017	REG	--	832	3,750

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
IW026	5/4/2017	REG	--	698	3,140
IW027	5/4/2017	REG	--	430	2,320
IW028	5/4/2017	REG	--	702	2,740
IW029P	5/11/2017	REG	< 1.50 U	1,100	5,550
IW029P	5/11/2017	FD	< 1.50 U	1,080	5,440
LordWW	5/11/2017	REG	--	1,490	2,730
MW001	5/10/2017	REG	< 1.50 U	408	2,500
MW001	5/10/2017	FD	< 1.50 U	475	2,580
MW001	9/26/2017	REG	< 1.50 U	482	2,810
MW001	4/4/2018	REG	< 1.50 U	292	2,350
MW001	9/11/2018	REG	< 1.50 U	275	2,610
MW001	4/17/2019	REG	< 1.50 U	451	2,570
MW001	10/10/2019	REG	< 2.14 U	498	2,680
MW002	5/9/2017	REG	< 1.50 U	845	2,750
MW002A	5/9/2017	REG	--	1,400	3,510
MW002A	9/22/2017	REG	--	1,310	3,550
MW002A	4/4/2018	REG	--	1,620	3,010
MW002A	9/14/2018	REG	--	1,610	3,330
MW002A	4/17/2019	REG	--	1,430	3,420
MW002A	10/10/2019	REG	--	1,630	3,410
MW002A	10/10/2019	FD	--	1,390	3,430
MW003	5/4/2017	REG	--	64.1	784
MW004	5/5/2017	REG	< 1.50 U	672 J	2,880
MW004	5/5/2017	FD	< 1.50 U	1,120 J	3,550
MW004A	5/5/2017	REG	--	643	2,420
MW004A	9/22/2017	REG	--	579	2,640
MW004A	4/4/2018	REG	< 1.50 U	628	2,110
MW004A	9/14/2018	REG	--	632	2,230
MW004A	4/16/2019	REG	--	550	1,080
MW004A	10/11/2019	REG	--	635	2,230
MW007	5/4/2017	REG	--	43.2	1,040
MW007A	5/4/2017	REG	--	764	2,950
MW007A	9/22/2017	REG	--	662	3,290
MW007A	4/4/2018	REG	--	815	3,060
MW007A	9/14/2018	REG	--	801	3,040
MW007A	4/17/2019	REG	--	792	3,350
MW007A	10/11/2019	REG	--	843	2,980
MW008	5/4/2017	REG	--	824	3,420
MW008A	5/4/2017	REG	--	771	2,740
MW008M	5/4/2017	REG	--	1,390	4,730
MW008M	9/22/2017	REG	--	1,250	4,930
MW008M	4/4/2018	REG	--	1,470	4,580

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW008M	4/4/2018	FD	--	1,490	3,820
MW008M	9/14/2018	REG	--	1,350	4,600
MW008M	4/17/2019	REG	--	1,350	5,040
MW008M	10/10/2019	REG	--	1,530	4,680
MW009	5/4/2017	REG	--	120	1,010
MW009A	5/4/2017	REG	--	447	1,780
MW010	5/9/2017	REG	--	2,730	6,960
MW010	9/21/2017	REG	--	2,360	5,620
MW010	4/2/2018	REG	--	2,920	4,910
MW010	9/13/2018	REG	--	2,550	4,990
MW010	4/16/2019	REG	--	2,380	4,160
MW010	10/10/2019	REG	--	2,450	5,330
MW010	10/10/2019	FD	--	2,520	5,300
MW011	5/5/2017	REG	--	1,580	4,630
MW011A	5/5/2017	REG	--	941	3,310
MW011A	9/22/2017	REG	--	785	3,530
MW011A	9/22/2017	FD	--	790	2,950
MW011A	4/4/2018	REG	--	729	2,090
MW011A	9/14/2018	REG	--	646	2,160
MW011A	9/14/2018	FD	--	576	2,080
MW011A	4/17/2019	REG	--	511	1,930
MW011A	10/10/2019	REG	--	433	1,800
MW011M	5/5/2017	REG	--	1,360	3,970
MW012	5/5/2017	REG	--	469	2,080
MW012A	5/5/2017	REG	--	85.4	528
MW012M	5/5/2017	REG	--	752	3,690
MW012M	4/4/2018	REG	--	800	3,140
MW012M	4/17/2019	REG	--	800	3,130
MW013	5/9/2017	REG	--	816	3,220
MW013	9/21/2017	REG	--	255	3,220
MW013	4/2/2018	REG	--	850	2,880
MW013	9/13/2018	REG	--	692	2,810
MW013	4/16/2019	REG	--	859	2,940
MW013	10/10/2019	REG	--	814	3,220
MW013A	5/11/2017	REG	--	84.5	506
MW015	5/11/2017	REG	--	476	1,700
MW015A	5/11/2017	REG	--	3,800	6,250
MW015A	9/22/2017	REG	--	361	1,940
MW015A	4/2/2018	REG	--	5,570	8,370
MW015A	4/2/2018	FD	--	5,430	8,500
MW015A	9/13/2018	REG	--	5,950	9,850
MW015A	4/16/2019	REG	--	4,250	6,120

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW015A	10/9/2019	REG	--	5,480	9,970
MW016A	9/14/2018	REG	--	513	1,290
MW018	5/10/2017	REG	--	210	1,120
MW018	9/21/2017	REG	--	241	1,290
MW018	4/2/2018	REG	--	660	1,900
MW018	4/2/2018	FD	--	601	2,020
MW018	9/13/2018	REG	--	528	2,210
MW018	4/16/2019	REG	--	455	1,600
MW018	10/9/2019	REG	--	502	1,650
MW019A	5/10/2017	REG	--	327	1,300
MW019A	9/21/2017	REG	--	262	1,250
MW019A	4/2/2018	REG	--	301	1,060
MW019A	9/13/2018	REG	--	291	1,170
MW019A	4/16/2019	REG	--	303	1,110
MW019A	10/9/2019	REG	--	346	1,200
MW020	5/11/2017	REG	--	733	2,180
MW020A	5/11/2017	REG	--	1,070	2,410
MW020A	9/21/2017	REG	--	1,010	2,700
MW020A	4/2/2018	REG	--	1,130	2,180
MW020A	9/13/2018	REG	--	961	2,370
MW020A	4/16/2019	REG	--	1,320	2,180
MW020A	4/16/2019	FD	--	1,060	2,140
MW020A	10/9/2019	REG	--	1,260	2,560
MW021A	5/10/2017	REG	--	2,530	5,210
MW021A	9/22/2017	REG	--	2,210	5,830
MW021A	4/3/2018	REG	--	2,640	4,240
MW021A	9/12/2018	REG	--	2,330	5,170
MW021A	4/12/2019	REG	--	1,020	5,150
MW021A	10/10/2019	REG	--	2,360	5,810
MW023	5/11/2017	REG	--	798	3,180
MW023	9/21/2017	REG	--	739	3,540
MW023	3/29/2018	REG	--	747	2,800
MW023	9/13/2018	REG	--	785	3,160
MW023	4/15/2019	REG	--	860	3,150
MW023	10/8/2019	REG	--	716	3,360
MW023A	5/11/2017	REG	--	49.9	594
MW024	5/11/2017	REG	< 1.50 U	875	1,720
MW024A	5/11/2017	REG	--	918	2,370
MW024A	9/21/2017	REG	--	790	2,620
MW024A	9/21/2017	FD	--	748	3,010
MW024A	3/29/2018	REG	--	884	2,360
MW024A	9/12/2018	REG	--	901	2,420

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW024A	9/12/2018	FD	--	894	2,310
MW024A	4/12/2019	REG	--	997	2,140
MW024A	10/8/2019	REG	--	790	2,470
MW026	9/22/2017	REG	--	108	890
MW026	4/5/2018	REG	--	229	1,180
MW026	9/13/2018	REG	--	129	860
MW026	4/16/2019	REG	--	104	696
MW026	10/11/2019	REG	--	105	741
MW027	5/11/2017	REG	--	365	1,680
MW027	9/22/2017	REG	--	351	1,760
MW027	4/3/2018	REG	--	366	1,480
MW027	9/13/2018	REG	--	355	1,600
MW027	4/16/2019	REG	--	367	1,550
MW027	10/9/2019	REG	--	358	1,610
MW030	5/11/2017	REG	--	249	588
MW030	9/21/2017	REG	--	202	778
MW030	3/29/2018	REG	--	241	662
MW030	9/13/2018	REG	--	245	726
MW030	4/12/2019	REG	--	220	694
MW030	10/8/2019	REG	--	190	715
MW030P	5/4/2017	REG	--	478	2,020
MW031	5/11/2017	REG	--	138	780
MW031	9/21/2017	REG	--	166	854
MW031	3/29/2018	REG	--	228	840
MW031	9/13/2018	REG	--	233	832
MW031	4/15/2019	REG	--	263	874
MW031	10/9/2019	REG	--	230	876
MW031	10/9/2019	FD	--	243	866
MW032	9/22/2017	REG	--	250	1,400
MW032	4/3/2018	REG	--	285	1,190
MW032	9/13/2018	REG	--	309	1,190
MW032	4/16/2019	REG	--	386	1,340 J
MW032	4/16/2019	FD	--	374	372 J
MW032	10/9/2019	REG	--	428	1,390
MW034	5/5/2017	REG	--	431	1,630
MW036	5/9/2017	REG	< 1.50 U	165	914
MW037	5/9/2017	REG	1.36 J	647	1,510
MW037	9/26/2017	REG	1.51	513	1,470
MW037	4/4/2018	REG	0.944 J	516	1,770
MW037	4/4/2018	FD	0.961 J	432	1,400
MW037	9/11/2018	REG	1.04 J	549	1,470
MW037	4/16/2019	REG	2.87	405	1,320

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW037	10/10/2019	REG	1.56 J	559	1,440
MW038	5/9/2017	REG	1.19 J	104	966
MW038	5/9/2017	FD	0.988 J	111	1,010
MW040A	5/9/2017	REG	--	53.7	574
MW040A	9/21/2017	REG	--	203	540
MW040A	4/2/2018	REG	--	50.3	504
MW040A	9/13/2018	REG	--	51.6	497
MW040A	4/16/2019	REG	--	56.4	481
MW040A	10/10/2019	REG	--	55.8	526
MW041A	5/5/2017	REG	--	408	1,630
MW041A	9/21/2017	REG	--	377	1,680
MW041A	3/29/2018	REG	--	390	1,520
MW041A	9/12/2018	REG	--	403	1,600
MW041A	4/16/2019	REG	--	461	1,530
MW041A	10/9/2019	REG	--	488	1,620
MW042A	5/9/2017	REG	< 1.50 U	2,470	5,270
MW043	5/9/2017	REG	< 1.50 U	712	556
MW043	9/26/2017	FD	< 1.50 U	679 J	1,780
MW043	9/26/2017	REG	< 1.50 U	530 J	1,650
MW043	4/3/2018	REG	< 1.50 U	724	1,960
MW043	9/11/2018	REG	< 1.50 U	610	1,620
MW043	9/11/2018	FD	< 1.50 U	641	1,670
MW043	4/15/2019	REG	< 1.50 U	843	1,840
MW043	10/10/2019	REG	< 2.16 U	862	2,000
MW044	5/9/2017	REG	< 1.50 U	492 J	2,620
MW044	4/4/2018	REG	< 1.50 U	346	1,430
MW045	5/9/2017	REG	< 1.50 U	79.8	1,450
MW045	9/26/2017	REG	0.997 J	76.7	1,430
MW045	4/5/2018	REG	< 1.50 U	69.3	1,120
MW045	4/5/2018	REG	< 1.50 U	70.2	1,370
MW045	4/5/2018	REG	< 1.50 U	69	1,370
MW045	9/11/2018	REG	< 1.50 U	72.1	1,350
MW045	4/17/2019	REG	< 1.50 U	76	1,460
MW045	4/17/2019	FD	< 1.50 U	77.3	1,400
MW045	10/10/2019	REG	< 2.20 U	79.7	1,330
MW046	5/9/2017	REG	1.38 J	175	1,200
MW046A	5/9/2017	REG	< 1.50 U	704	3,100
MW046A	9/26/2017	REG	< 1.50 U	639	3,040
MW046A	4/4/2018	REG	< 1.50 U	704	2,370
MW046A	9/11/2018	REG	< 1.50 U	704	2,980
MW046A	4/17/2019	REG	< 1.50 U	745	3,260
MW046A	10/10/2019	REG	< 2.16 U	719	3,080

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW047	5/10/2017	REG	--	498	2,440
MW047	9/22/2017	REG	--	446	2,550
MW047	4/4/2018	REG	--	388	2,050
MW047	9/14/2018	REG	--	276	1,950
MW047	4/17/2019	REG	--	272	968
MW047	10/11/2019	REG	--	486	2,650
MW048SA	5/5/2017	REG	--	647	2,220
MW048SA	5/5/2017	FD	--	674	2,360
MW048SA	9/20/2017	REG	--	667	2,370
MW048SA	3/23/2018	REG	--	643	2,110
MW048SA	9/12/2018	REG	--	583	1,960
MW048SA	4/16/2019	REG	--	607	1,860
MW048SA	10/9/2019	REG	--	631	2,900
MW049SA	5/5/2017	REG	--	1,560	3,700
MW049SA	9/20/2017	REG	--	1,640	3,880
MW049SA	3/23/2018	REG	--	1,530	3,880
MW049SA	9/12/2018	REG	--	1,300	2,960
MW049SA	4/16/2019	REG	--	1,320	2,530
MW049SA	10/9/2019	REG	--	1,210	2,800
MW050SA	5/10/2017	REG	--	1,260	3,560
MW050SA	9/21/2017	REG	--	533	3,960
MW050SA	4/3/2018	REG	--	1,470	3,480
MW050SA	4/3/2018	FD	--	1,440	3,500
MW050SA	9/12/2018	REG	--	1,510	3,580
MW050SA	4/15/2019	REG	--	1,420	3,500
MW050SA	10/9/2019	REG	--	1,450	3,800
MW051SA	5/10/2017	REG	--	1,210	3,390
MW051SA	9/20/2017	REG	--	1,120	3,620
MW051SA	4/3/2018	REG	--	1,360	3,320
MW051SA	9/12/2018	REG	--	1,120	3,300
MW051SA	4/15/2019	REG	--	1,220	3,160
MW051SA	10/10/2019	REG	--	1,050	3,330
MW052SA	5/10/2017	REG	--	1,450	3,150
MW052SA	9/20/2017	REG	--	1,630	3,720
MW052SA	3/23/2018	REG	--	1,360	3,020
MW052SA	9/12/2018	REG	--	1,400	3,020
MW052SA	4/16/2019	REG	--	1,590	3,060
MW052SA	10/9/2019	REG	--	1,470	3,040
MW054SA	5/10/2017	REG	--	826	1,990
MW054SA	9/20/2017	REG	--	866	2,190
MW054SA	9/20/2017	FD	--	863	2,380
MW054SA	3/23/2018	REG	--	777	2,200

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW054SA	9/12/2018	REG	--	800	1,970
MW054SA	9/12/2018	FD	--	801	1,970
MW054SA	4/16/2019	REG	--	951	1,910
MW054SA	10/9/2019	REG	--	913	1,940
MW055SA	5/9/2017	REG	--	613	1,800
MW055SA	9/20/2017	REG	--	650	1,920
MW055SA	3/22/2018	REG	--	620	1,650
MW055SA	9/12/2018	REG	--	622	1,660
MW055SA	4/12/2019	REG	--	653	1,700
MW055SA	10/8/2019	REG	--	574	1,810
MW056SA	5/9/2017	REG	--	1,180	3,800
MW056SA	9/20/2017	REG	--	1,240	3,970
MW056SA	4/3/2018	REG	--	1,260	3,560
MW056SA	9/12/2018	REG	--	1,130	3,380
MW056SA	4/17/2019	REG	--	1,120	3,650
MW056SA	10/9/2019	REG	--	1,190	3,220
MW057SA	5/9/2017	REG	--	272	1,210
MW057SA	9/20/2017	REG	--	324	1,480
MW057SA	3/22/2018	REG	--	302	1,470
MW057SA	9/12/2018	REG	--	346	1,450
MW057SA	4/15/2019	REG	--	357	1,500
MW057SA	10/9/2019	REG	--	387	1,500
MW058	5/11/2017	REG	--	995 J	3,530 J
MW058	5/11/2017	FD	--	627 J	1,670 J
MW058	3/29/2018	REG	--	1,230	3,980
MW058	4/12/2019	REG	--	1,150	4,180
MW058	4/12/2019	FD	--	1,040	3,900
MW059	5/11/2017	REG	--	951	3,670
MW059	9/21/2017	REG	--	810	3,820
MW059	3/29/2018	REG	--	925	3,610
MW059	9/13/2018	REG	--	904	3,070
MW059	4/15/2019	REG	--	891	2,950
MW059	10/8/2019	REG	--	640 J	3,530
MW059	10/8/2019	FD	--	885 J	3,400
MW060	9/22/2017	REG	--	1,370	3,950
MW060	3/29/2018	REG	--	1,750	3,600
MW060	9/13/2018	REG	--	1,560	3,470
MW060	4/16/2019	REG	--	1,670	3,390
MW060	10/9/2019	REG	--	1,490	3,480
MW061	5/11/2017	REG	--	883	3,840
MW061	9/22/2017	REG	--	927	4,900
MW061	4/3/2018	REG	--	1,030	3,600

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW061	4/3/2018	FD	--	1,140	3,660
MW061	9/13/2018	REG	--	1,060	3,830
MW061	4/16/2019	REG	--	1,180	3,980
MW061	10/9/2019	REG	--	1,040	4,300
MW062A	5/11/2017	REG	--	63	334
MW062A	5/11/2017	FD	--	62.8	418
MW062A	9/21/2017	REG	--	59	482
MW062A	3/29/2018	REG	--	55.8	471
MW062A	9/12/2018	REG	--	57.9	497
MW062A	4/12/2019	REG	--	62.9	474
MW062A	10/8/2019	REG	--	60.8	489
MW063A	5/11/2017	REG	--	67.8	414
MW063A	9/21/2017	REG	--	51.7	518
MW063A	3/29/2018	REG	--	49.2	444
MW063A	9/12/2018	REG	--	51.7	472
MW063A	4/12/2019	REG	--	58.5	459
MW063A	10/8/2019	REG	--	54.4	484
MW065SA	5/9/2017	REG	--	1,050	3,380
MW065SA	5/9/2017	FD	--	1,060	3,050
MW065SA	4/5/2018	REG	--	1,050	2,910
MW065SA	4/11/2019	REG	--	1,050	2,590
MW066SA	5/9/2017	REG	--	1,160	3,560
MW066SA	9/20/2017	REG	--	1,170	3,120
MW066SA	3/22/2018	REG	--	1,050	1,050
MW066SA	9/12/2018	REG	--	884	2,350
MW066SA	4/11/2019	REG	--	836	2,040
MW066SA	10/8/2019	REG	--	510	1,860
MW067SA	5/8/2017	REG	--	165	944
MW067SA	9/20/2017	REG	--	163	1,070
MW067SA	9/20/2017	FD	--	163	1,050
MW068	5/11/2017	REG	--	8,760	10,400
MW068	9/22/2017	REG	--	10,100	18,800
MW068	4/3/2018	REG	--	11,700	14,300
MW068	9/13/2018	REG	--	11,700	18,000
MW068	4/15/2019	REG	--	7,100	10,500
MW068	10/9/2019	REG	--	8,880	15,500
MW069	5/11/2017	REG	--	981	2,450
MW069	9/21/2017	REG	--	715	2,120
MW069	3/29/2018	REG	--	846	1,730
MW069	9/13/2018	REG	--	804	1,990
MW069	4/15/2019	REG	--	9,650	14,800
MW069	10/9/2019	REG	--	9,140	14,200

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW070	5/11/2017	REG	--	298	672
MW070	9/21/2017	REG	--	287	1,040
MW070	3/29/2018	REG	--	350	956
MW070	3/29/2018	FD	--	350	996
MW070	9/12/2018	REG	--	387	1,120
MW070	4/12/2019	REG	--	444	1,130
MW070	10/8/2019	REG	--	398	1,220
MW071SA	5/9/2017	REG	--	590	1,750
MW071SA	9/20/2017	REG	--	495	1,380
MW071SA	3/22/2018	REG	--	560	1,410
MW071SA	9/12/2018	REG	--	613	1,580
MW071SA	4/11/2019	REG	--	636	1,490
MW071SA	10/8/2019	REG	--	587	1,580
MW071SA	10/8/2019	FD	--	707	1,580
MW072SA	5/9/2017	REG	--	262	1,150
MW072SA	9/20/2017	REG	--	273	1,190
MW072SA	3/22/2018	REG	--	231	882
MW072SA	9/12/2018	REG	--	238	1,090
MW072SA	4/11/2019	REG	--	218	1,050
MW072SA	10/9/2019	REG	--	282	1,050
MW073SA	5/9/2017	REG	--	409	902
MW073SA	9/20/2017	REG	--	250	886
MW073SA	3/22/2018	REG	--	189	3,270
MW073SA	9/12/2018	REG	--	229	965
MW073SA	4/11/2019	REG	--	1,000	2,020
MW073SA	10/9/2019	REG	--	2,100	4,320
MW074SA	5/9/2017	REG	--	394	1,610
MW074SA	9/20/2017	REG	--	382	1,700
MW074SA	3/22/2018	REG	--	350	1,580
MW074SA	9/12/2018	REG	--	376	1,510
MW074SA	4/12/2019	REG	--	384	1,520
MW074SA	10/8/2019	REG	--	363	1,640
MW075SA	5/8/2017	REG	--	397	1,820
MW075SA	9/20/2017	REG	--	377	1,880
MW075SA	3/22/2018	REG	--	362	1,730
MW075SA	9/11/2018	REG	--	399	1,670
MW075SA	4/11/2019	REG	--	466	1,770
MW075SA	10/8/2019	REG	--	422	1,830
MW075SA	10/8/2019	FD	--	495	1,850
MW076SA	5/8/2017	REG	--	580	2,170
MW076SA	9/20/2017	REG	--	623	2,060
MW076SA	3/22/2018	REG	--	579	2,020

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW076SA	9/11/2018	REG	--	583	1,850
MW076SA	4/11/2019	REG	--	601	1,950
MW076SA	10/8/2019	REG	--	398	1,890
MW079SA	5/8/2017	REG	--	303	1,130
MW079SA	9/20/2017	REG	--	308	1,220
MW079SA	3/23/2018	REG	--	278	635
MW079SA	9/12/2018	REG	--	270	1,140
MW079SA	9/12/2018	FD	--	269	1,030
MW079SA	4/15/2019	REG	--	271	1,140
MW079SA	10/9/2019	REG	--	271	1,100
MW083SA	5/8/2017	REG	--	1,510	3,780
MW084SA	5/8/2017	REG	--	1,210	2,980
MW084SA	9/20/2017	REG	--	1,610	3,970
MW084SA	3/22/2018	REG	--	1,400	3,890
MW084SA	9/11/2018	REG	--	1,370	3,060
MW084SA	4/11/2019	REG	--	1,220	5,910
MW084SA	10/8/2019	REG	--	791	2,860
MW085SA	5/8/2017	REG	--	1,430	3,850
MW085SA	9/20/2017	REG	--	1,410	4,160
MW085SA	3/22/2018	REG	--	1,470	4,090
MW085SA	9/11/2018	REG	--	1,650	3,270
MW085SA	4/11/2019	REG	--	1,580	3,660
MW085SA	10/8/2019	REG	--	1,210	3,890
MW086SA	5/9/2017	REG	--	1,470	3,800
MW086SA	9/20/2017	REG	--	1,370	3,420
MW086SA	3/22/2018	REG	--	1,260	2,640
MW086SA	9/11/2018	REG	--	1,260	3,110
MW086SA	4/11/2019	REG	--	1,370	3,160
MW086SA	10/8/2019	REG	--	1,110	3,240
MW087A	5/4/2017	REG	--	1,210	3,550
MW087A	4/4/2018	REG	--	1,270	4,040
MW087A	4/17/2019	REG	--	1,190	3,840
MW088M	5/5/2017	REG	--	942	3,300
MW088M	9/22/2017	REG	--	820	3,100
MW088M	4/4/2018	REG	--	876	3,290
MW088M	9/13/2018	REG	--	1,760	3,200
MW088M	4/17/2019	REG	--	957	3,690
MW088M	10/10/2019	REG	--	980	3,620
MW089SA	5/4/2017	REG	--	948	3,160
MW089SA	9/22/2017	REG	--	905	4,240
MW089SA	4/4/2018	REG	--	1,020	3,730
MW089SA	9/14/2018	REG	--	1,040	3,780

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW089SA	4/17/2019	REG	--	934	4,260
MW089SA	10/11/2019	REG	--	929	3,770
MW090	5/4/2017	FD	--	374	2,320
MW090SA	5/4/2017	REG	--	471	2,460
MW090SA	4/4/2018	REG	--	520	2,280
MW090SA	4/17/2019	REG	--	520	2,210
MW091SA	5/5/2017	REG	--	780	3,340
MW093SA	9/22/2017	REG	--	857	3,880
MW093SA	3/29/2018	REG	--	982	3,000
MW093SA	9/14/2018	REG	--	914	3,440
MW093SA	4/16/2019	REG	--	984	3,220
MW093SA	10/10/2019	REG	--	18.2 J	3,500
MW093SA	10/10/2019	FD	--	885 J	3,390
MW094	5/11/2017	REG	--	873	4,000
MW094	4/3/2018	REG	--	960	3,390
MW094	4/16/2019	REG	--	1,070	3,860
MW095	5/11/2017	REG	--	1,650	6,570
MW095	3/29/2018	REG	--	1,520	4,020
MW095	9/13/2018	REG	--	1,380	3,650
MW095	4/16/2019	REG	--	1,500	3,760 J
MW095	4/16/2019	FD	--	1,410	5,320 J
MW095	10/9/2019	REG	--	1,280	3,440
MW095	10/9/2019	FD	--	1,260	3,740
MW096P	5/4/2017	REG	--	330	1,390
MW097P	5/4/2017	REG	--	1,010	3,760
MW097P	4/4/2018	REG	--	965	3,670
MW097P	4/16/2019	REG	--	1,010	3,480
MW099	5/11/2017	REG	--	74	336
MW099	9/21/2017	REG	--	66.9	496
MW099	3/29/2018	REG	--	64.8	429
MW099	3/29/2018	FD	--	67.2	447
MW099	9/13/2018	REG	--	64.6	496
MW099	4/12/2019	REG	--	72.8	453
MW099	10/9/2019	REG	--	67.1	486
MW100	5/9/2017	REG	--	690	1,780
MW100	5/9/2017	FD	--	632	1,700
MW100	9/20/2017	REG	--	667 J	1,640 J
MW100	9/20/2017	FD	--	216 J	760 J
MW100	3/22/2018	REG	--	743	2,200
MW100	9/11/2018	REG	--	789	1,640
MW100	9/11/2018	FD	--	865	1,730
MW100	4/11/2019	REG	--	948	1,900

**GROUNDWATER ANALYTICAL RESULTS
UBU3250 EUNICE NORTH GAS PLANT**

Parameter Name			C10-C28 Petroleum Hydrocarbons, Diesel	Chloride	Total Dissolved Solids (TDS)
Report Units			mg/L	mg/L	mg/L
Location ID	Date Sampled	Sample Purpose			
NMWQCC Domestic			--	250 mg/L	1000 mg/L
MW100	4/11/2019	FD	--	976	1,970
MW100	10/8/2019	REG	--	899	2,210
MW70A	5/11/2017	REG	--	49.3	414
RW003	5/5/2017	REG	--	509	2,460
RW004A	5/4/2017	REG	--	573	3,310
Teague	5/11/2017	REG	--	1,170	2,830
Trip Blank	5/5/2017	TB	--	--	--
Trip Blank	5/9/2017	TB	--	--	--
Trip Blank	5/10/2017	TB	--	--	--
Trip Blank	5/11/2017	TB	--	--	--
WoodellWW	5/11/2017	REG	--	532	1,630

APPENDIX G

Trend Analysis Summary



Table G-1 - 2019 Mann-Kendall Analysis Summary
Former Eunice North Gas Plant, New Mexico

Monitoring Well	Constituent	Criteria (mg/L)	Start Date	End Date	Summary Statistics							Mann-Kendall			
					n	% ND	Minimum Concentration (mg/L)	Maximum Concentration (mg/L)	Average Detected Concentration (mg/L)	Most Recent Concentration (mg/L)	CV	S-Statistic	p-value	Trend Determination	Significance
MW013	Chloride	250	5/16/2016	10/10/2019	8	0	255	936	748	814	0.28	-2	0.45	No trend	NS
	Dissolved Chromium	0.05			8	0	0.943	2.54	1.60	1.97	0.32	24	< 0.01	Increasing	Significant
MW041A	Chloride	250	5/16/2016	10/9/2019	7	0	377	488	423	488	0.09	7	0.19	Potentially increasing	NS
	Dissolved Chromium	0.05			7	0	0.189	0.210 J	0.200	0.193	0.04	0	0.56	Stable	NS
MW047	Chloride	250	5/20/2016	10/11/2019	7	0	272	498	408	486	0.24	-11	0.07	Decreasing	Significant
MW051SA	Chloride	250	5/18/2016	10/10/2019	7	0	1050	1,360	1,161	1,050	0.10	1	0.50	Stable	NS
	Dissolved Chromium (since 2017)	0.05	5/10/2017	10/10/2019	6	0	0.699	0.818	0.779	0.699	0.05	-11	0.03	Decreasing	Significant
MW058	Chloride	250	5/16/2016	4/12/2019	5	0	995	1,230	1,125	1,150	0.09	0	0.59	Stable	NS
	Dissolved Chromium	0.05			5	0	2.46	3.16	2.75	3.16	0.10	10	< 0.01	Increasing	Significant
MW069	Chloride	250	5/13/2016	10/9/2019	8	0	715	20,900	6,501	9,140	1.10	-4	0.36	Variable	NS
MW073SA	Chloride	250	5/17/2016	10/9/2019	8	0	189	2,100	583	2,100	1.15	6	0.27	Potentially increasing	NS
MW085SA	Chloride	250	5/17/2016	10/8/2019	8	0	1,210	1,650	1,429	1,210	0.10	10	0.14	Potentially increasing	NS
	Dissolved Chromium	0.05			8	0	0.0101	0.0559	0.0321	0.0497	0.45	18	0.02	Increasing	Significant
MW086SA	Chloride (since 2017)	250	5/9/2017	10/8/2019	6	0	1,110	1,470	1,307	1,110	0.10	-9	0.07	Decreasing	Significant
	Dissolved Chromium	0.05	5/18/2016	10/8/2019	8	0	0.0340	0.0762	0.0496	0.0762	0.26	0	0.55	Variable	NS
MW094	Chloride	250	5/13/2016	4/16/2019	5	0	873	1,130	1,019	1,070	0.10	-2	0.41	Stable	NS
	Dissolved Chromium	0.05			5	0	1.53	1.81	1.69	1.53	0.07	-8	0.04	Decreasing	Significant

Notes:

1. p-value <0.1 indicates a statistically significant trend (90% confidence level).

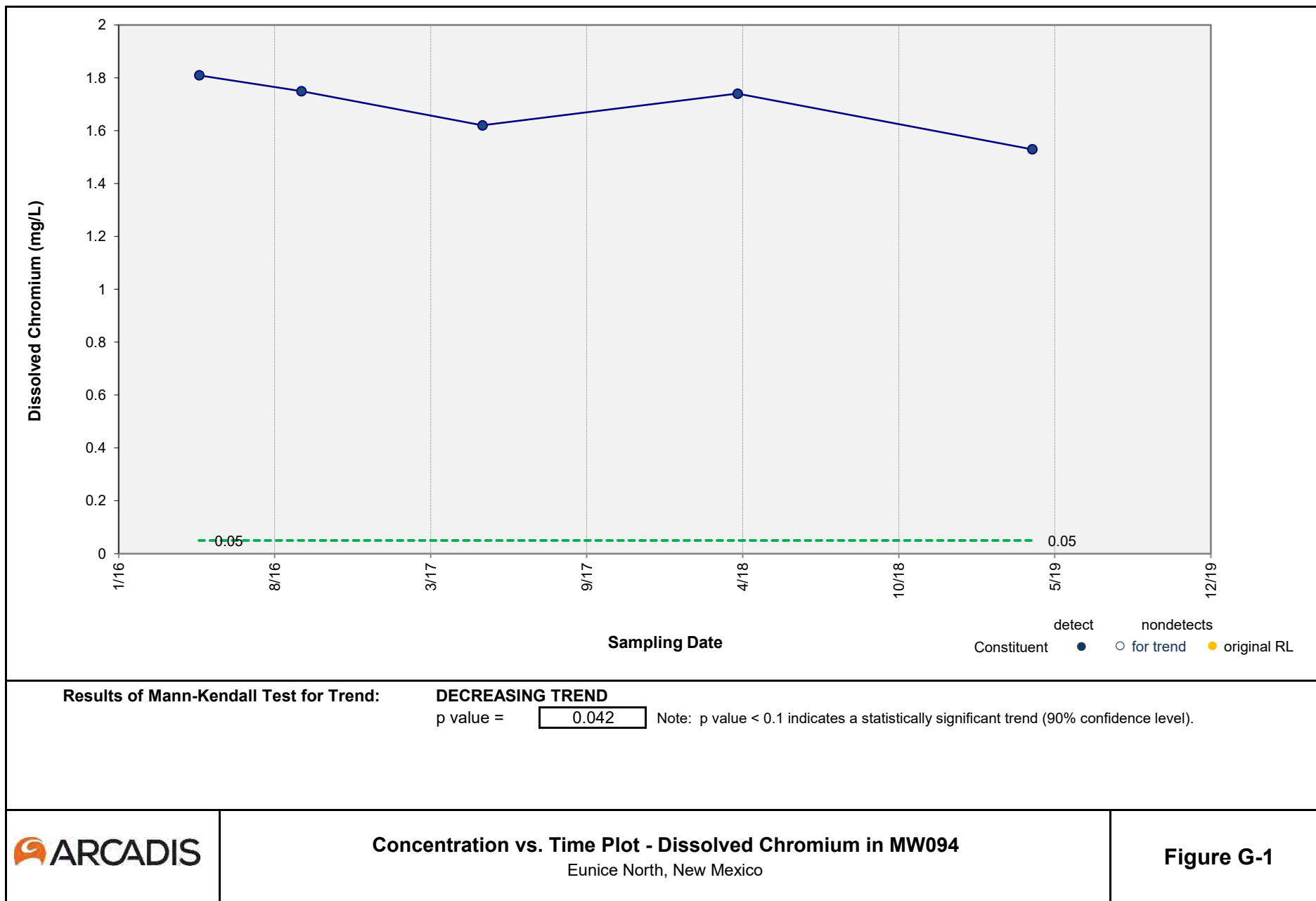
Acronyms:

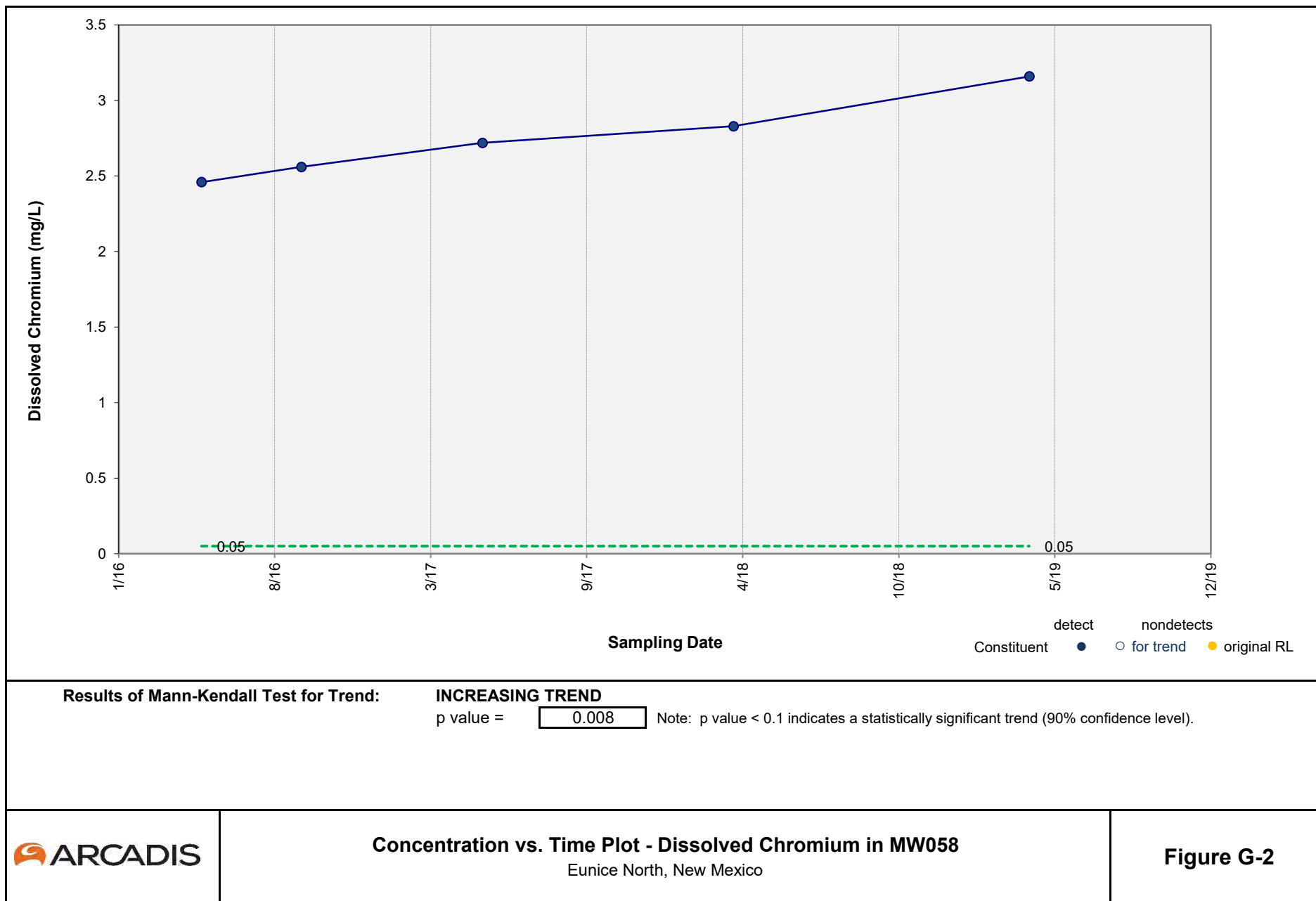
% - percent

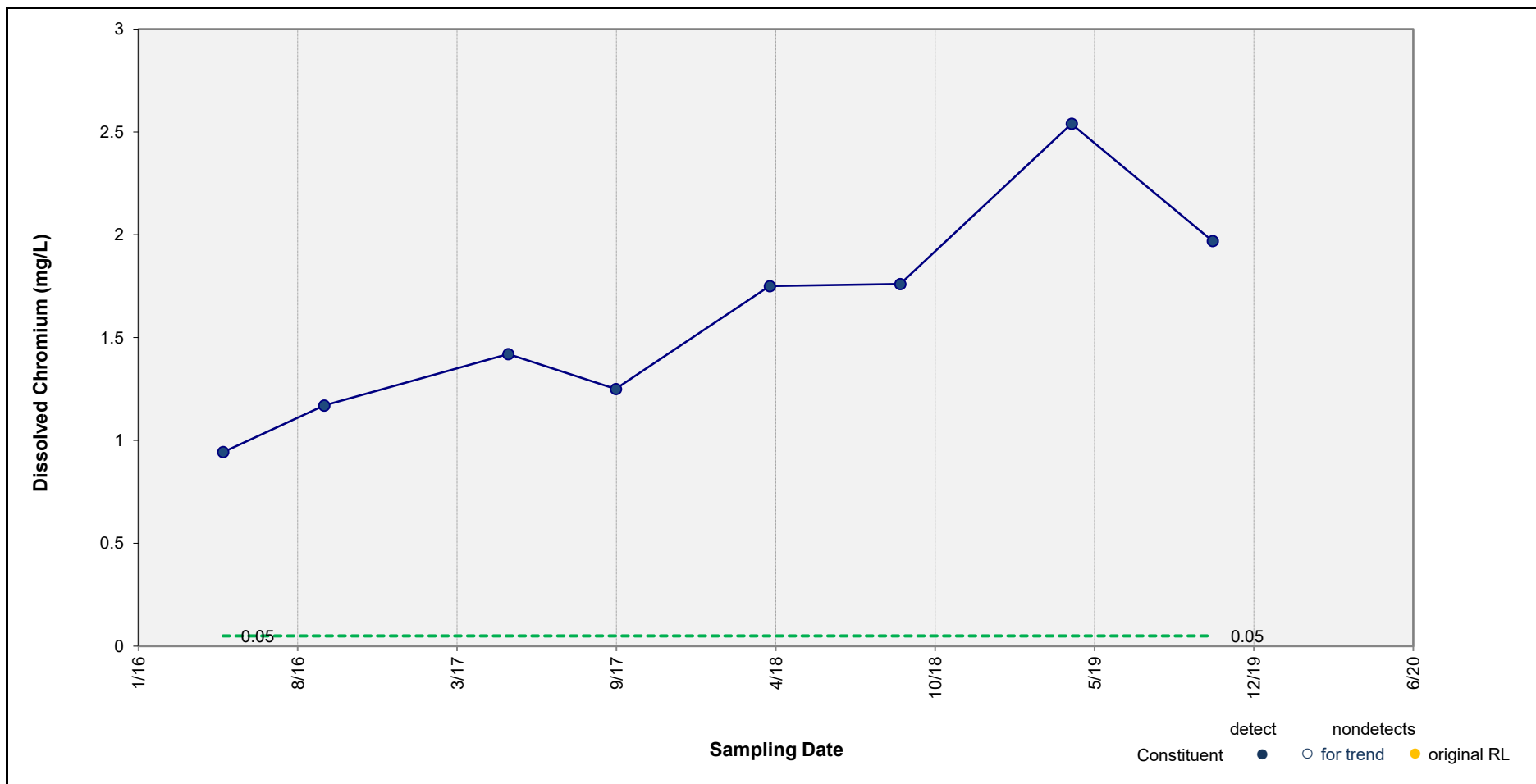
CV - coefficient of variation

mg/L - milligrams per liter

NS - not significant







Results of Mann-Kendall Test for Trend:

INCREASING TREND

p value =

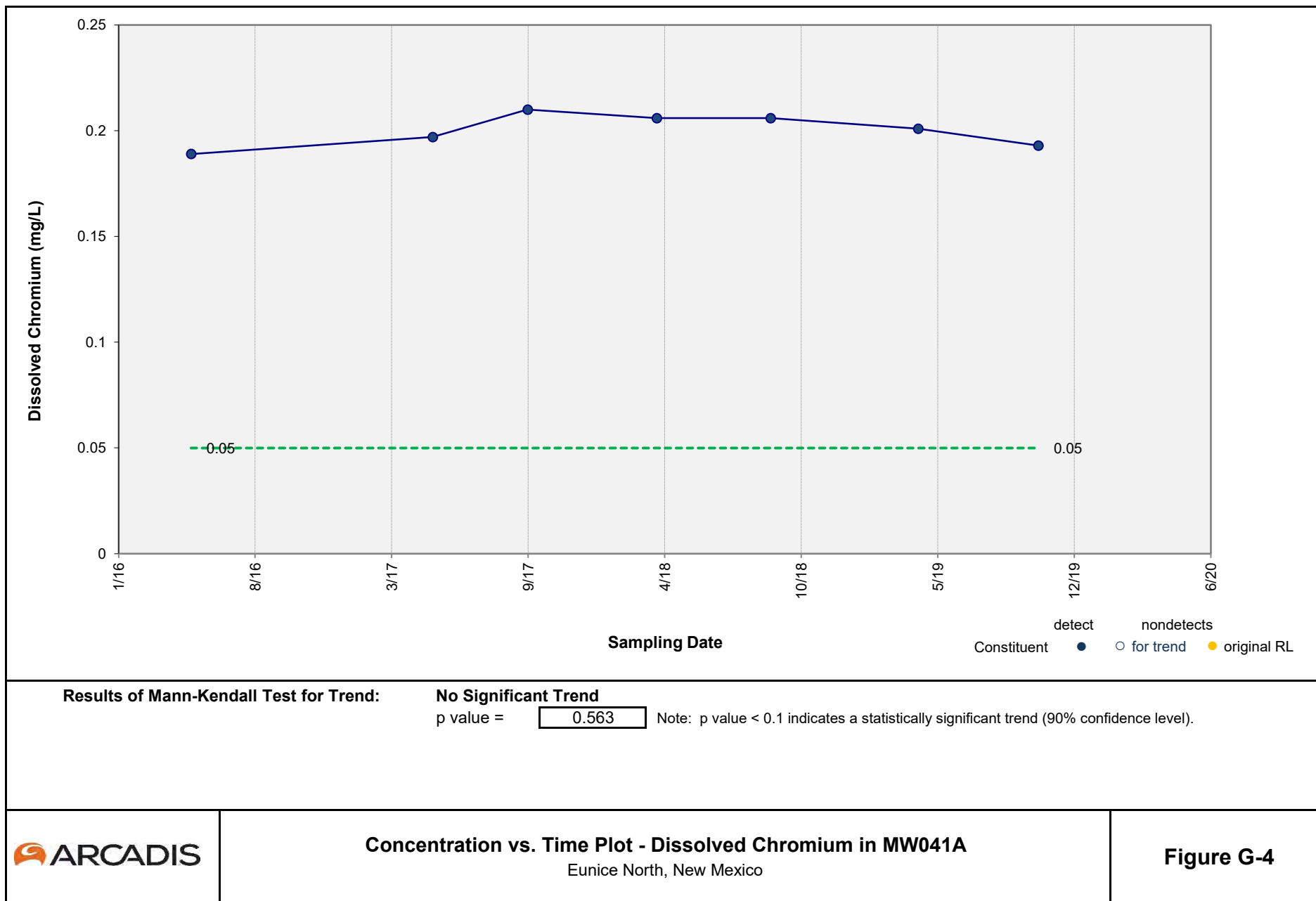
<0.001

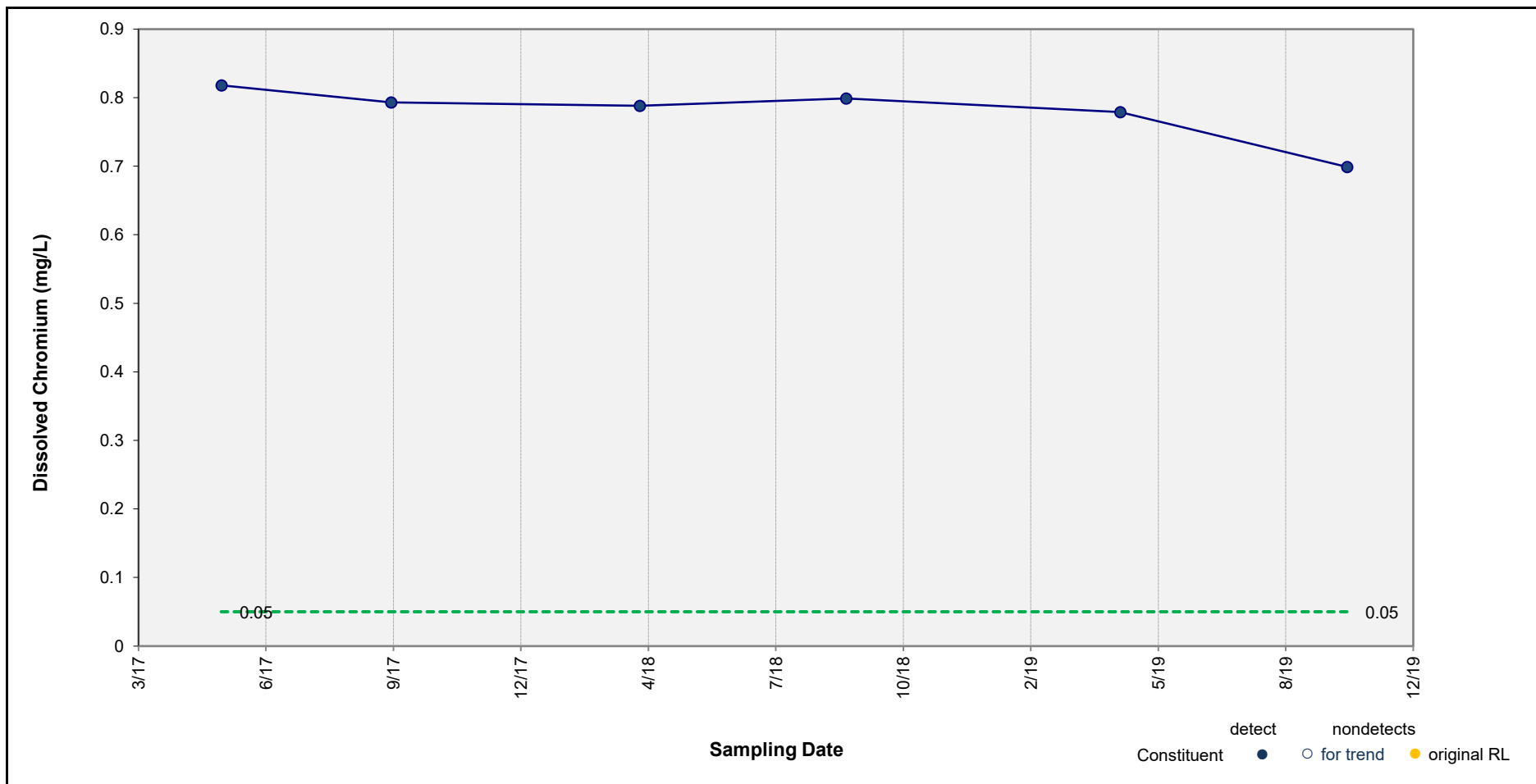
Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Dissolved Chromium in MW013
Eunice North, New Mexico

Figure G-3





Results of Mann-Kendall Test for Trend:

DECREASING TREND

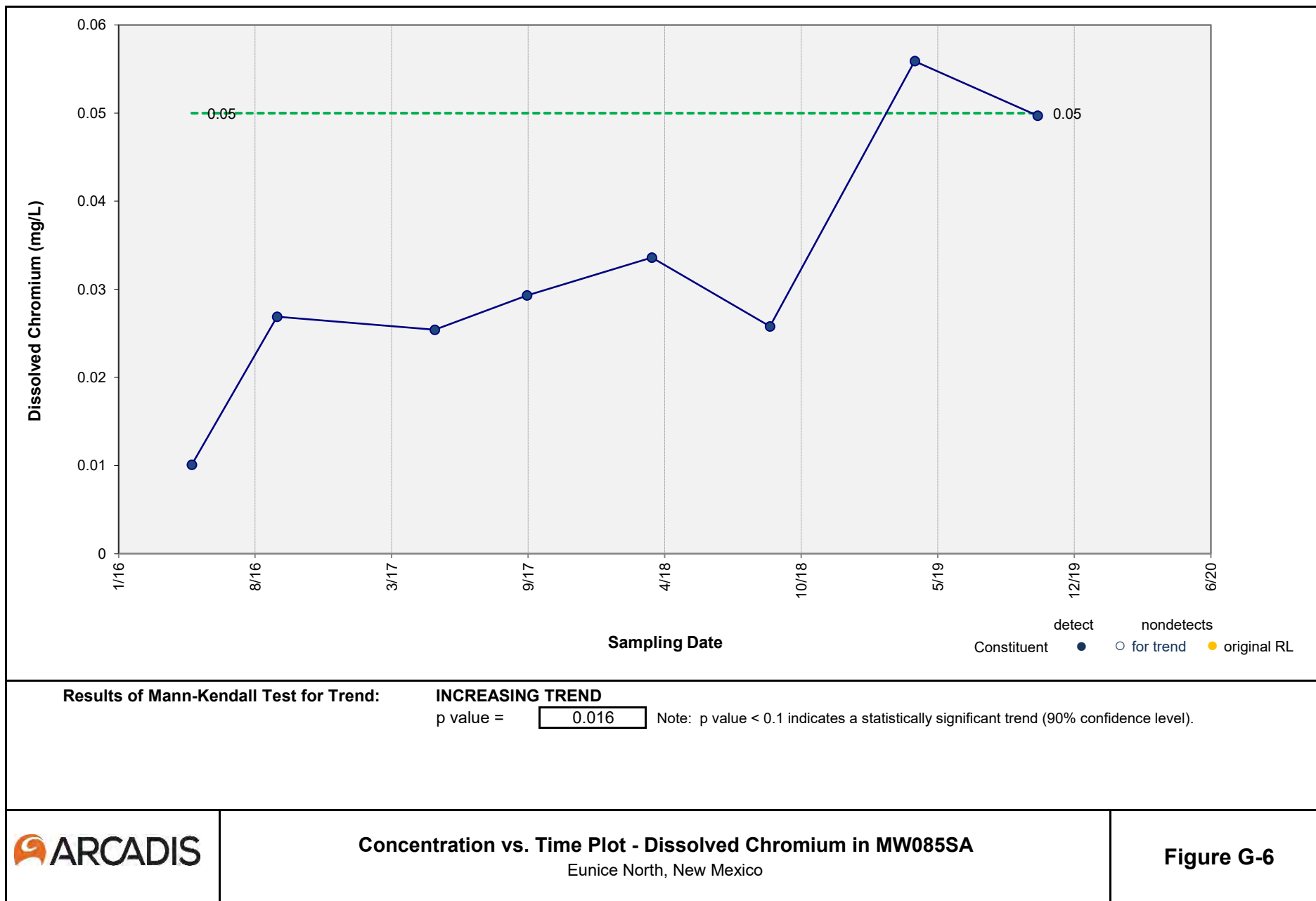
p value = **0.028**

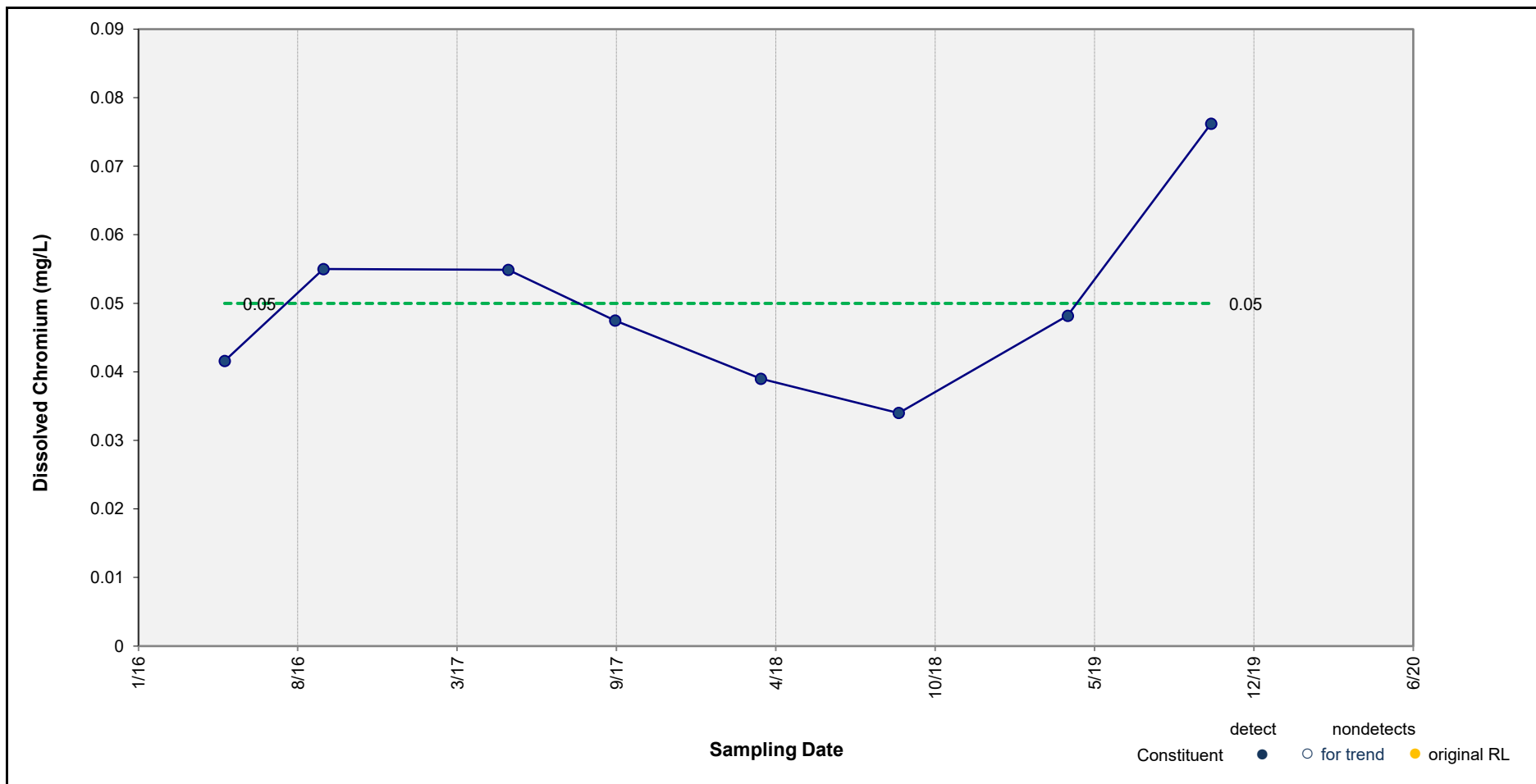
Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Dissolved Chromium in MW051SA (since 2017)
Eunice North, New Mexico

Figure G-5



**Results of Mann-Kendall Test for Trend:****No Significant Trend**

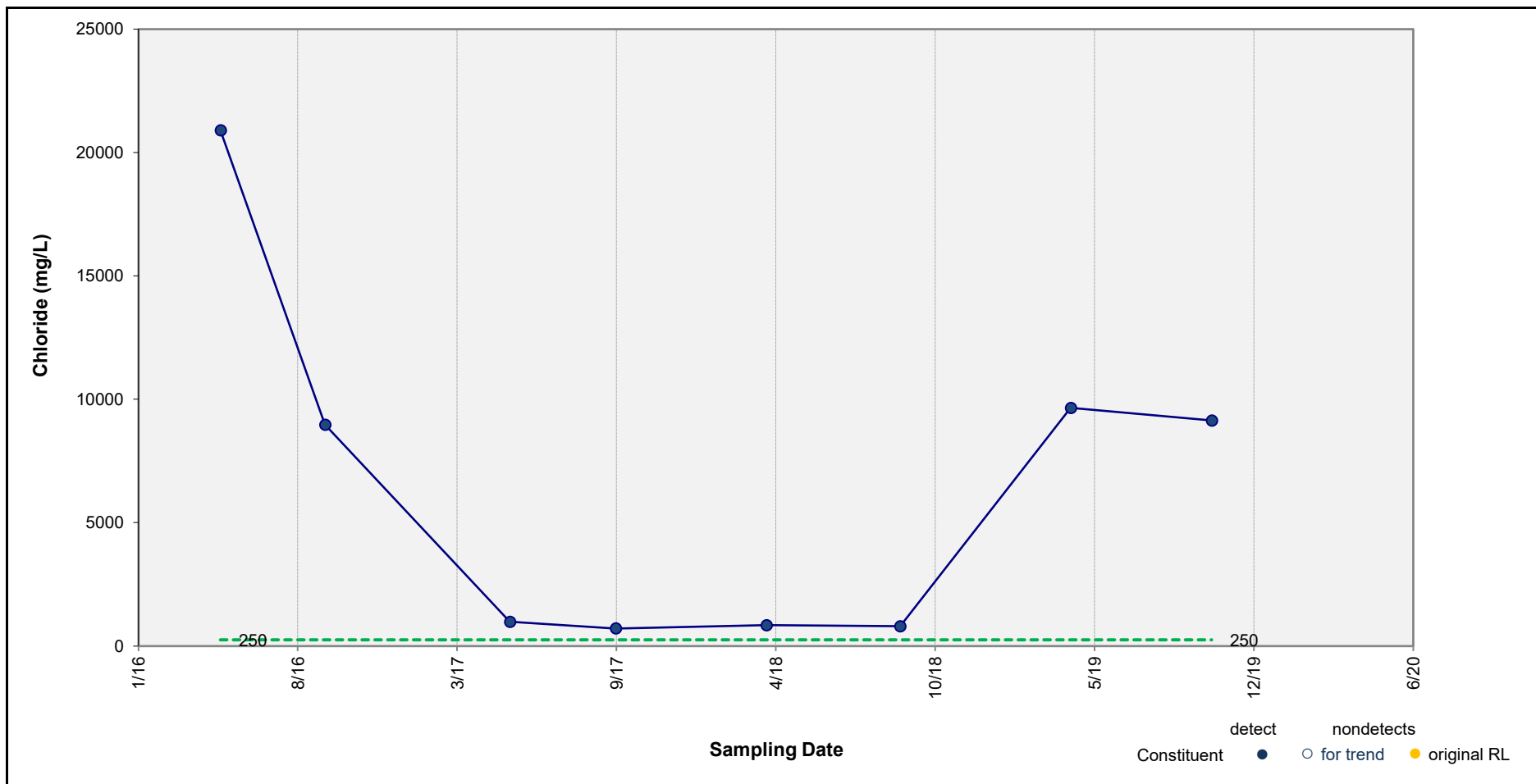
p value = 0.548

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Dissolved Chromium in MW086SA
Eunice North, New Mexico

Figure G-7

**Results of Mann-Kendall Test for Trend:****No Significant Trend**

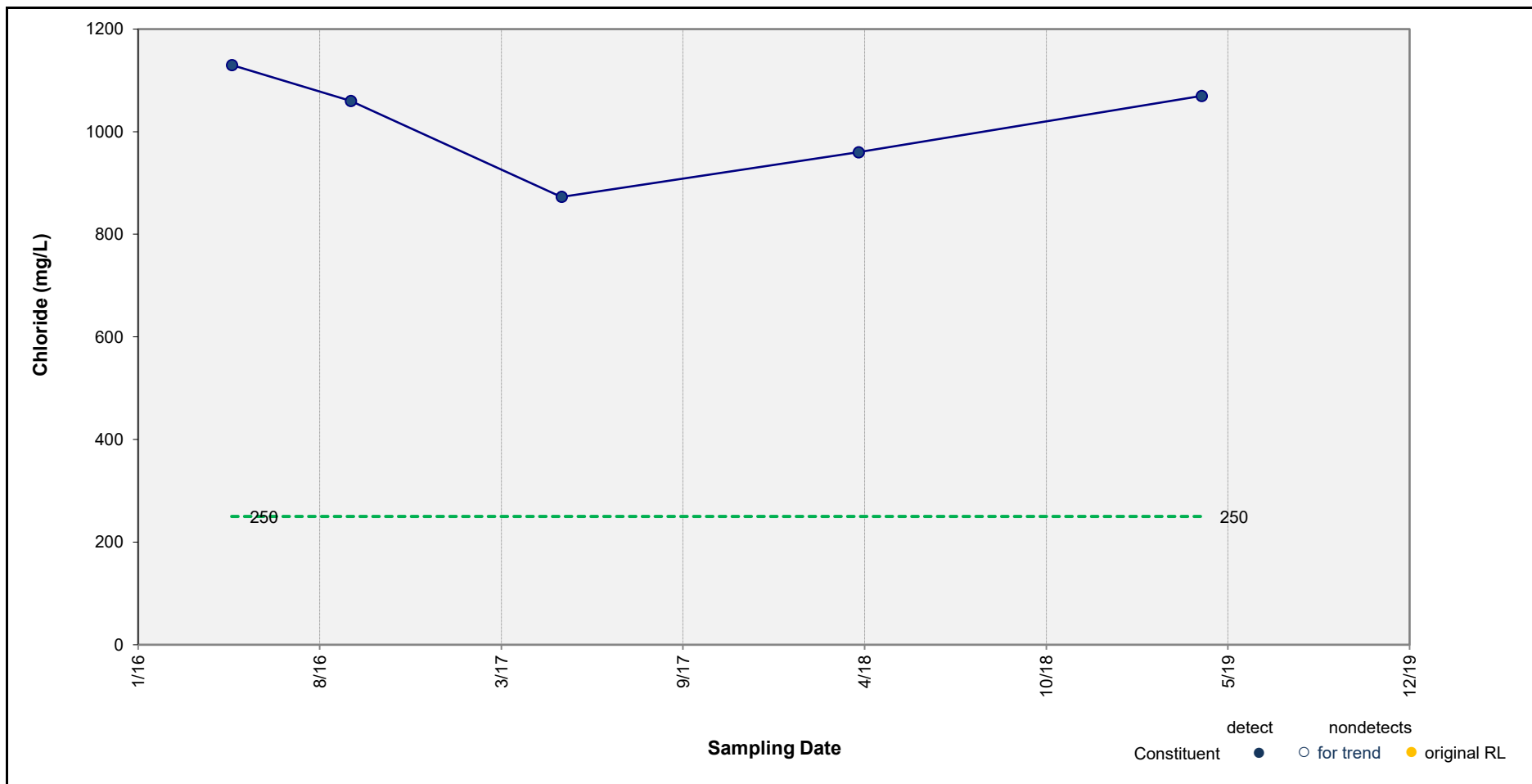
p value = 0.360

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW069
Eunice North, New Mexico

Figure G-8

**Results of Mann-Kendall Test for Trend:****No Significant Trend**

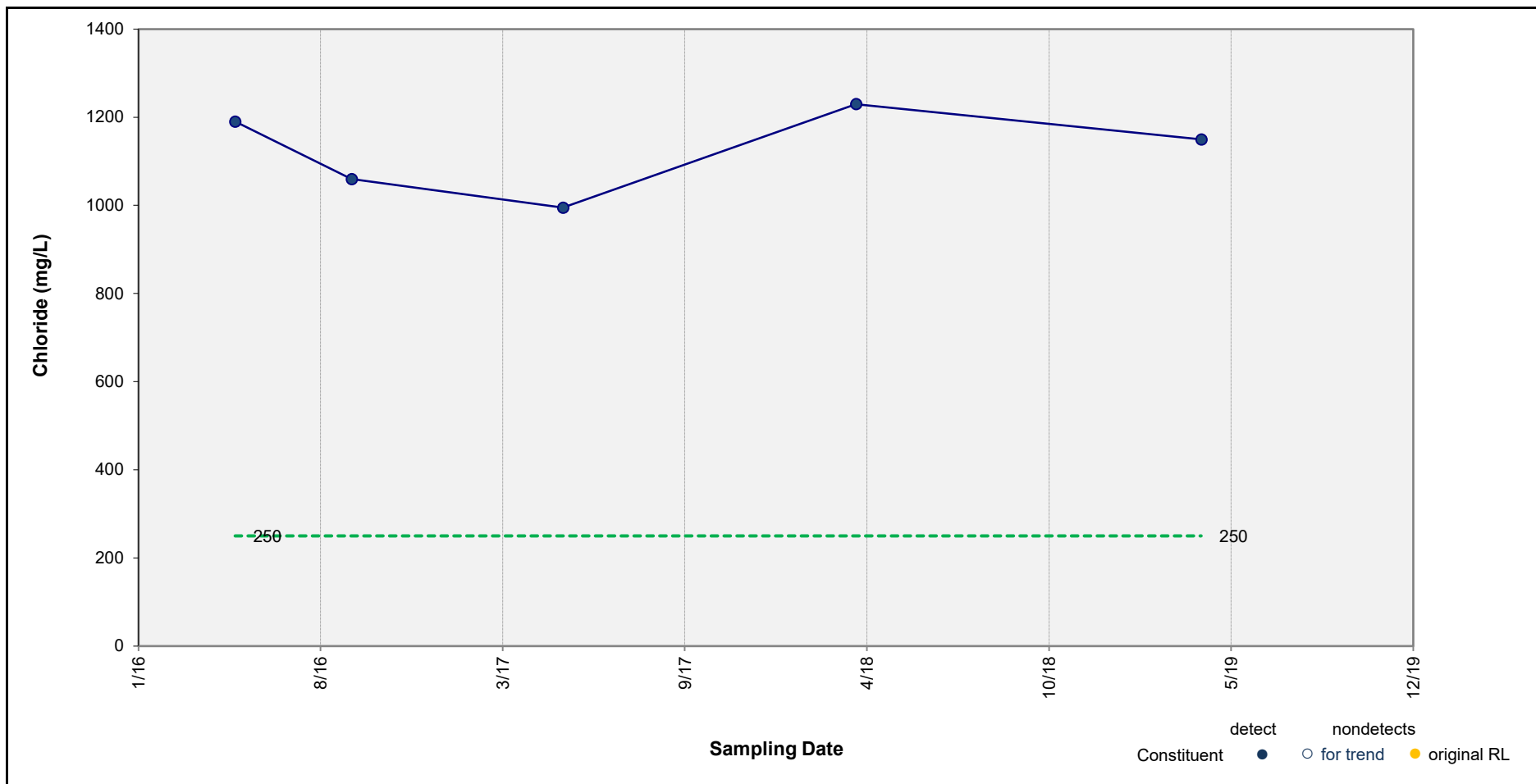
p value = 0.408

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW094
Eunice North, New Mexico

Figure G-9


Results of Mann-Kendall Test for Trend:
No Significant Trend

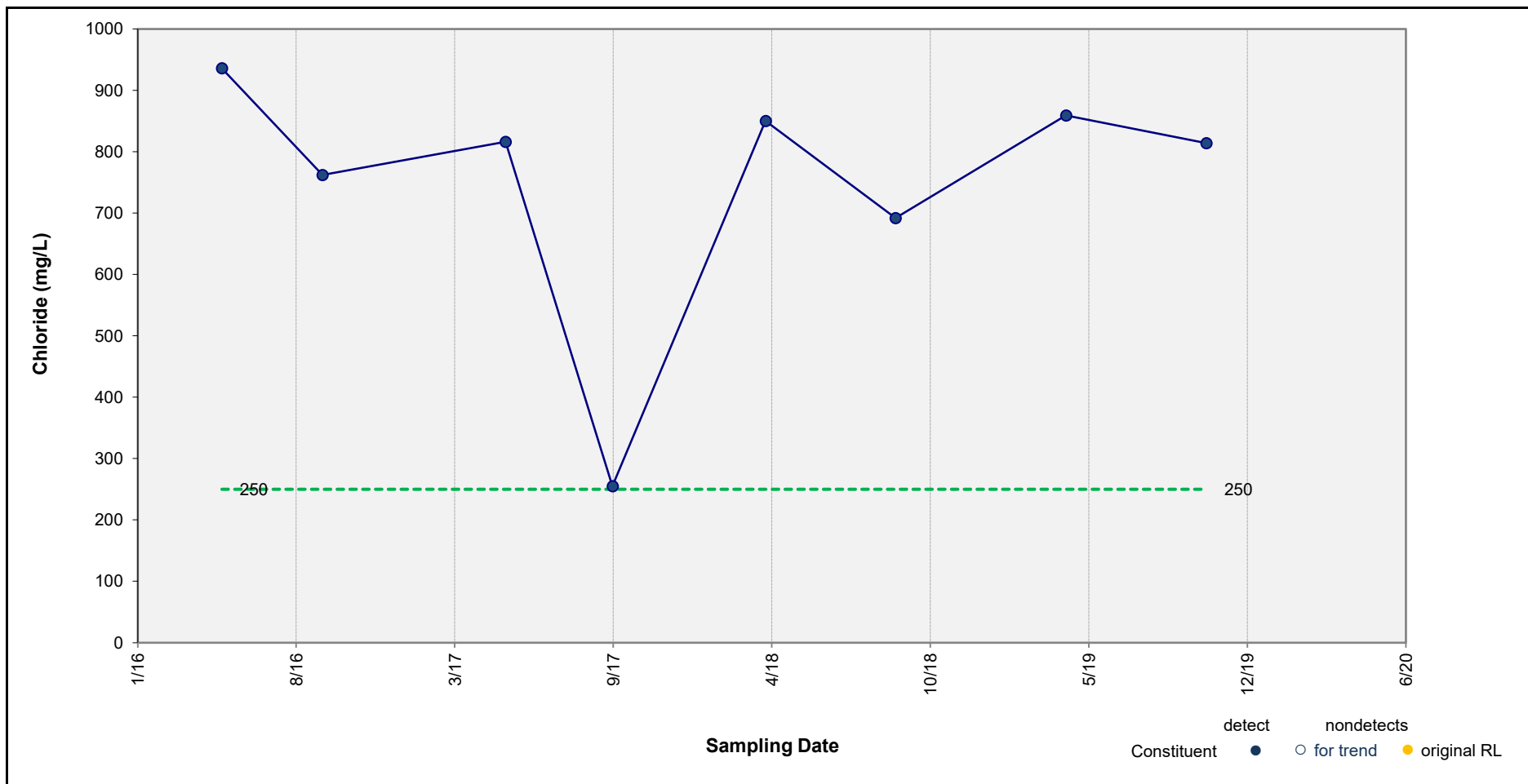
p value = 0.592

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW058
 Eunice North, New Mexico

Figure G-10

**Results of Mann-Kendall Test for Trend:****No Significant Trend**

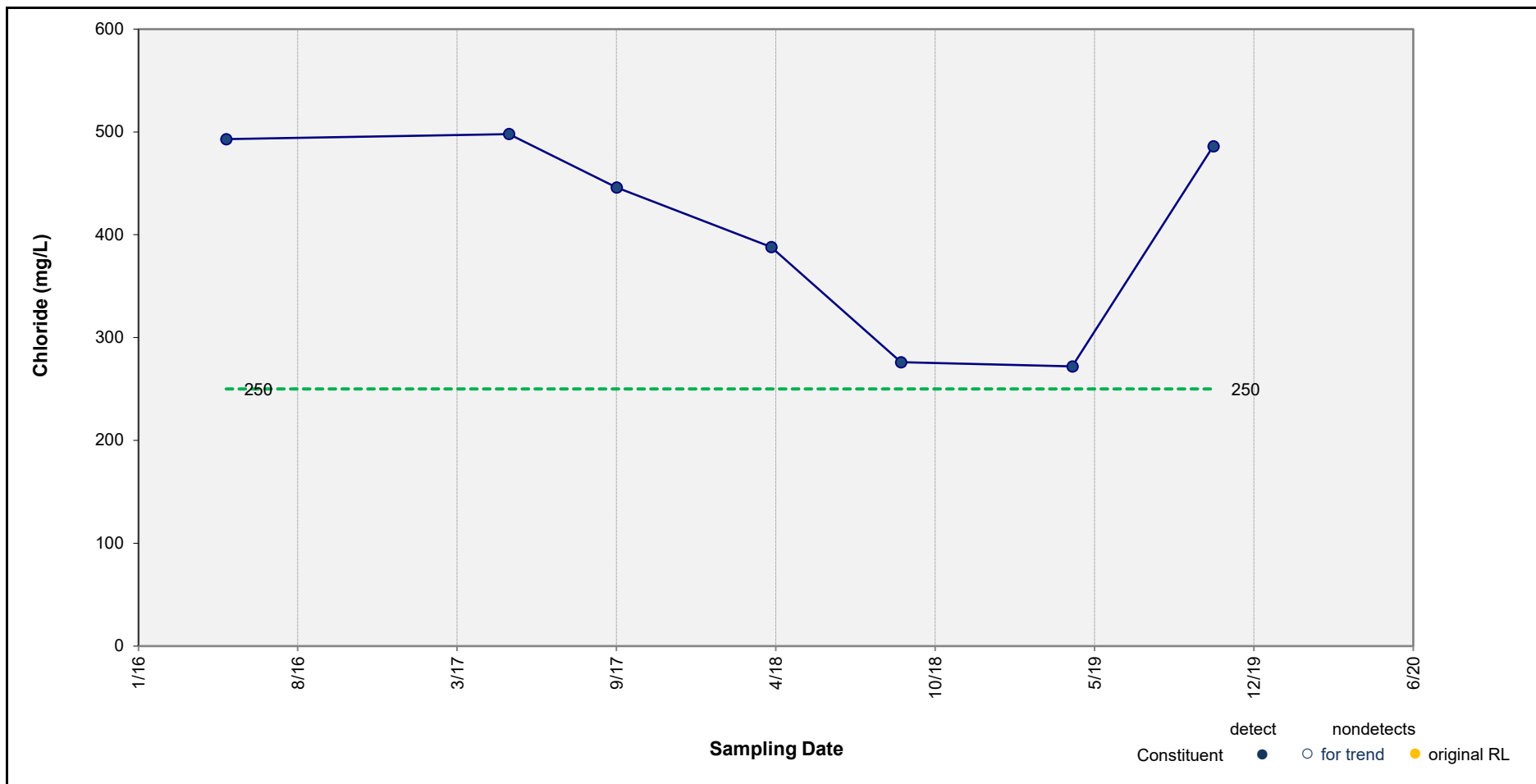
p value = 0.452

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW013
Eunice North, New Mexico

Figure G-11

**Results of Mann-Kendall Test for Trend:****DECREASING TREND**

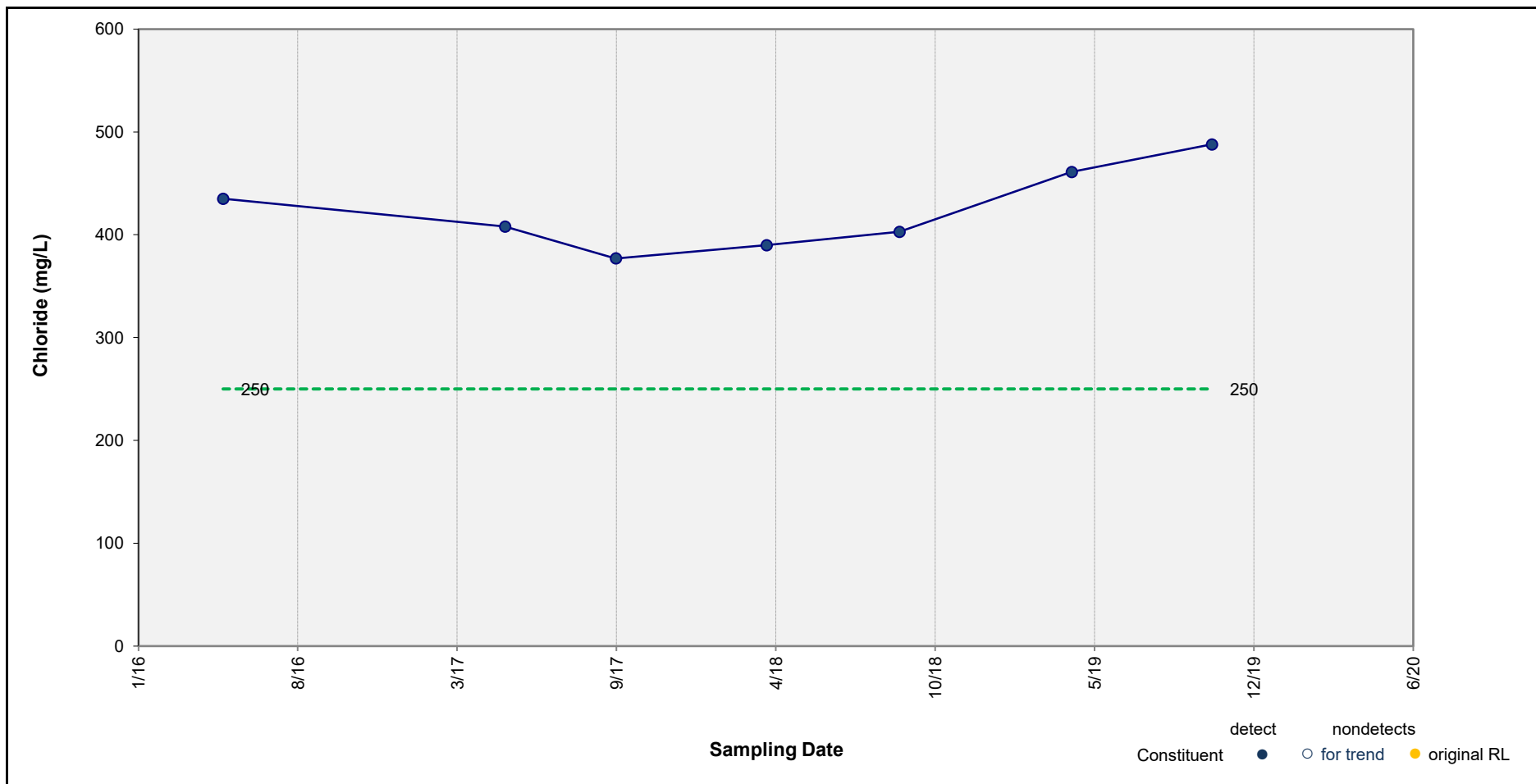
p value = 0.068

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW047
Eunice North, New Mexico

Figure G-12


Results of Mann-Kendall Test for Trend:
No Significant Trend

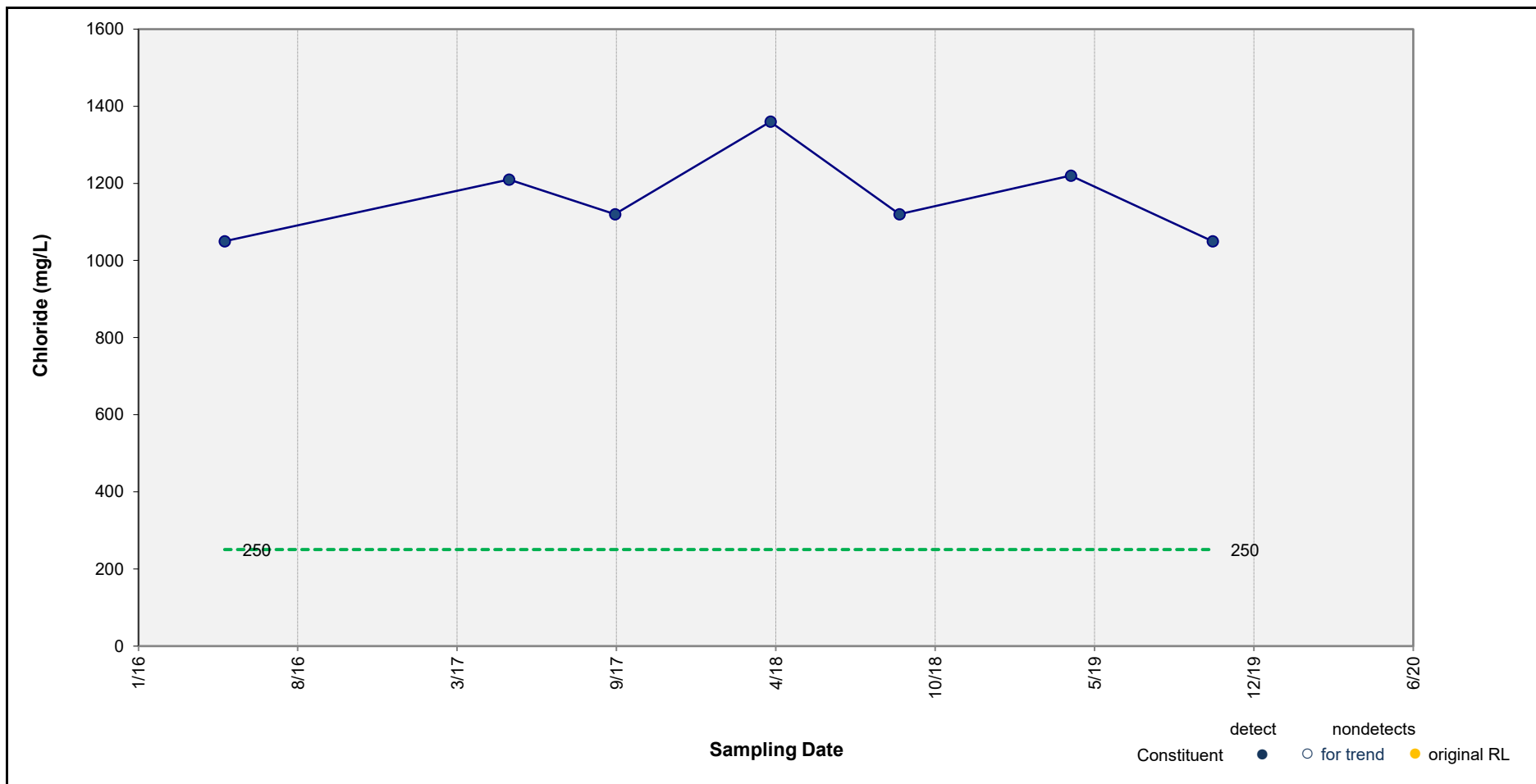
p value = 0.191

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW041A
Eunice North, New Mexico

Figure G-13


Results of Mann-Kendall Test for Trend:
No Significant Trend

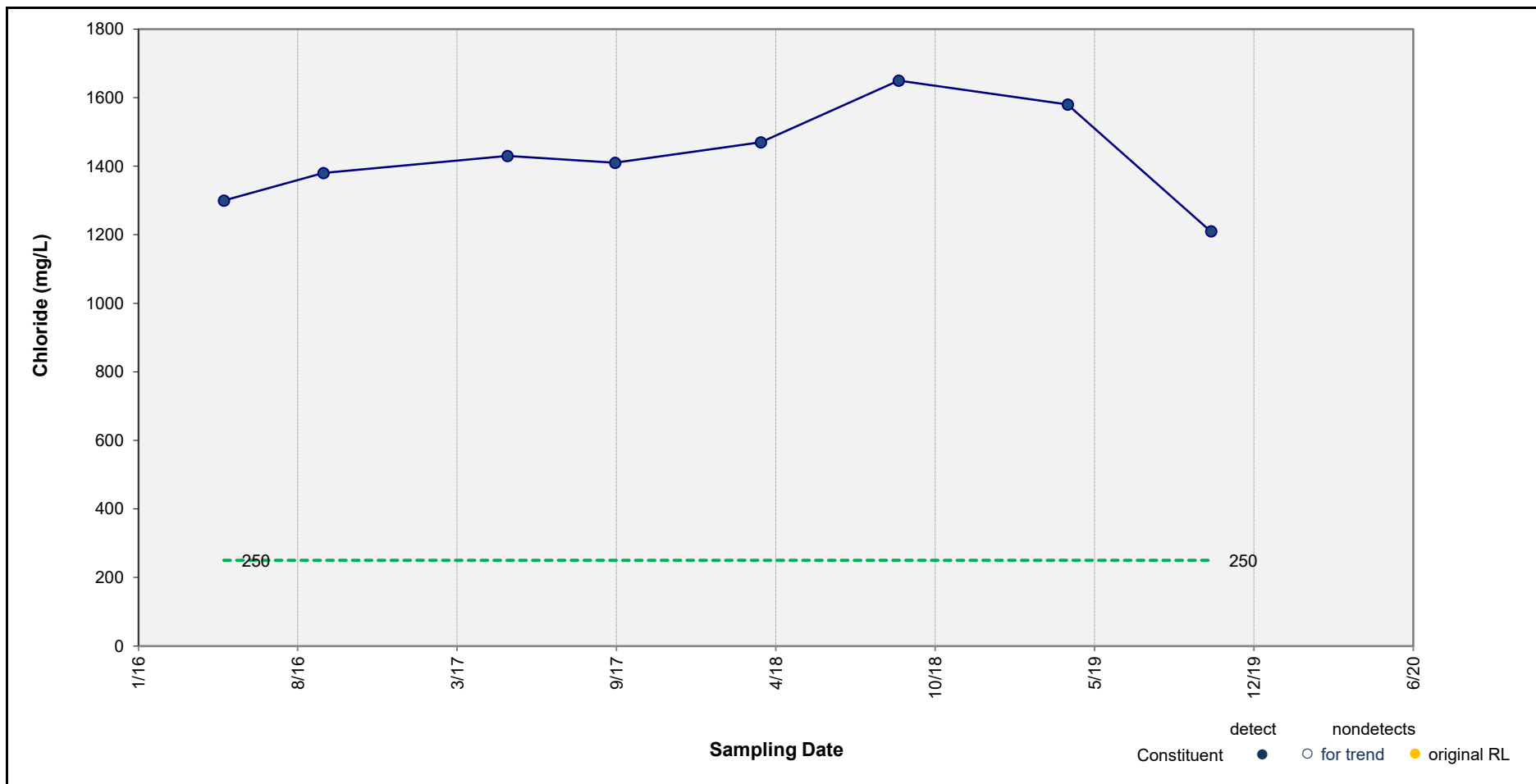
 p value = 0.500

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW051SA
 Eunice North

Figure G-14

**Results of Mann-Kendall Test for Trend:****No Significant Trend**

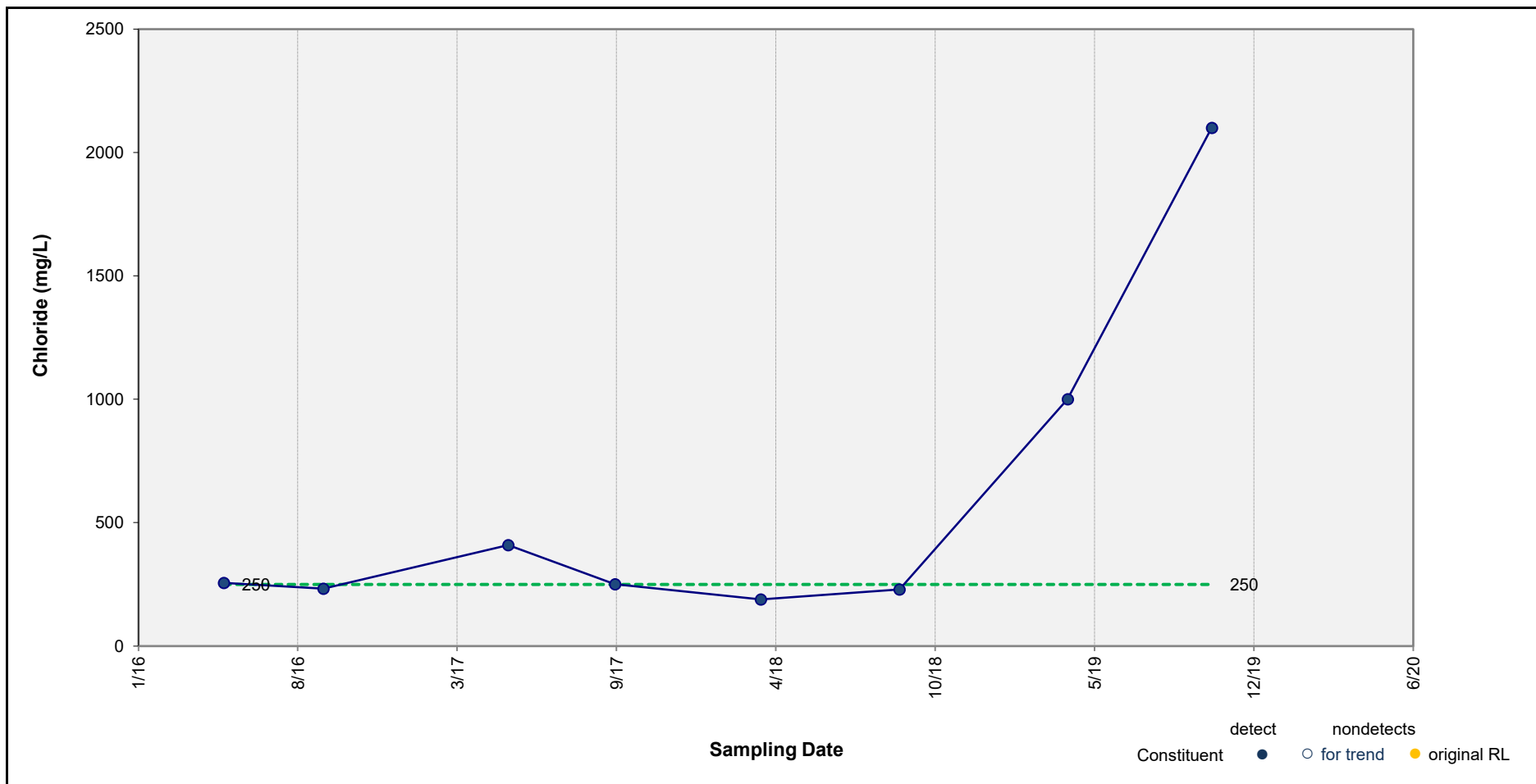
p value = 0.138

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW085SA
Eunice North, New Mexico

Figure G-15

**Results of Mann-Kendall Test for Trend:****No Significant Trend**

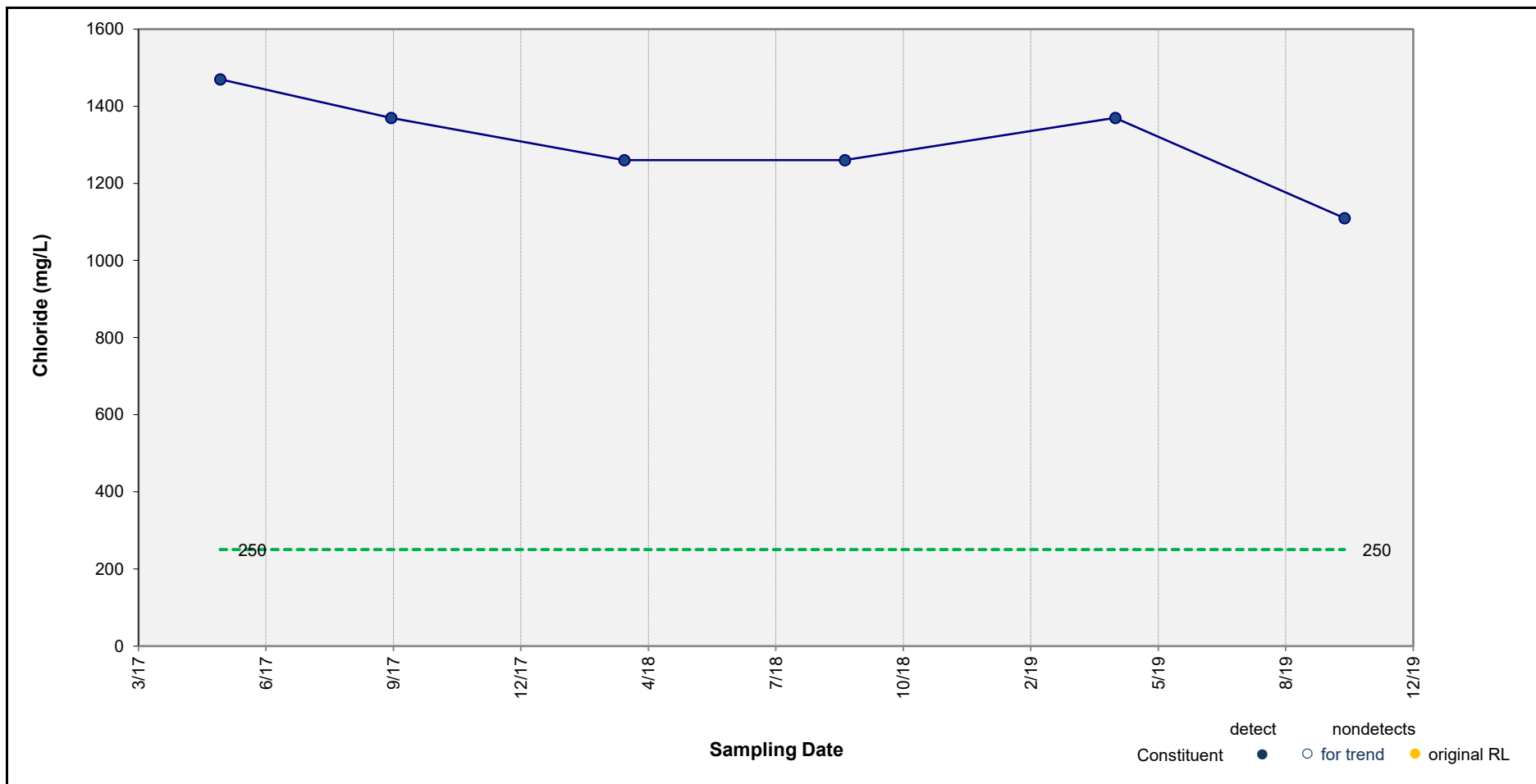
p value = 0.274

Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW073SA
Eunice North, New Mexico

Figure G-16



Results of Mann-Kendall Test for Trend:

DECREASING TREND

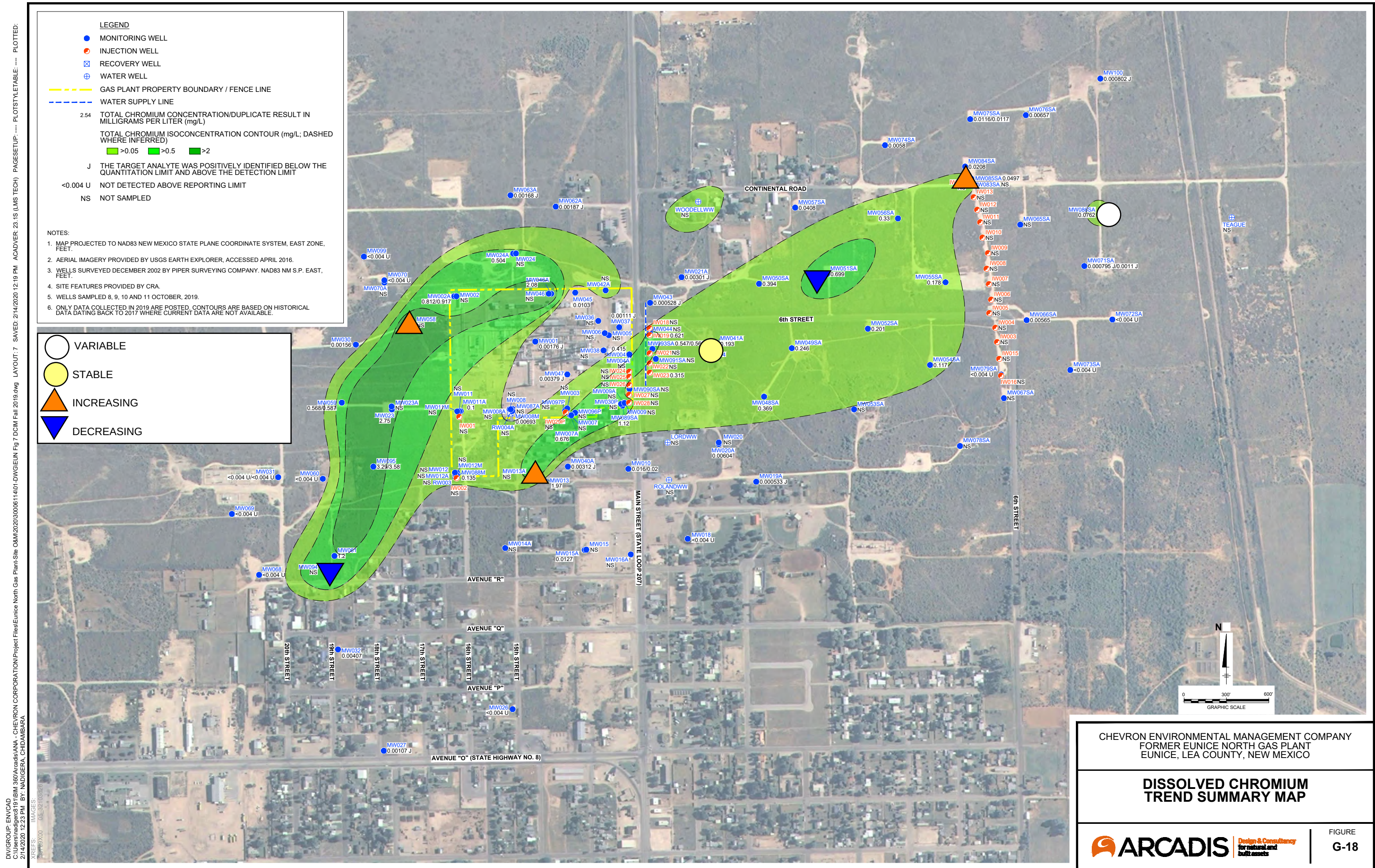
p value = 0.068

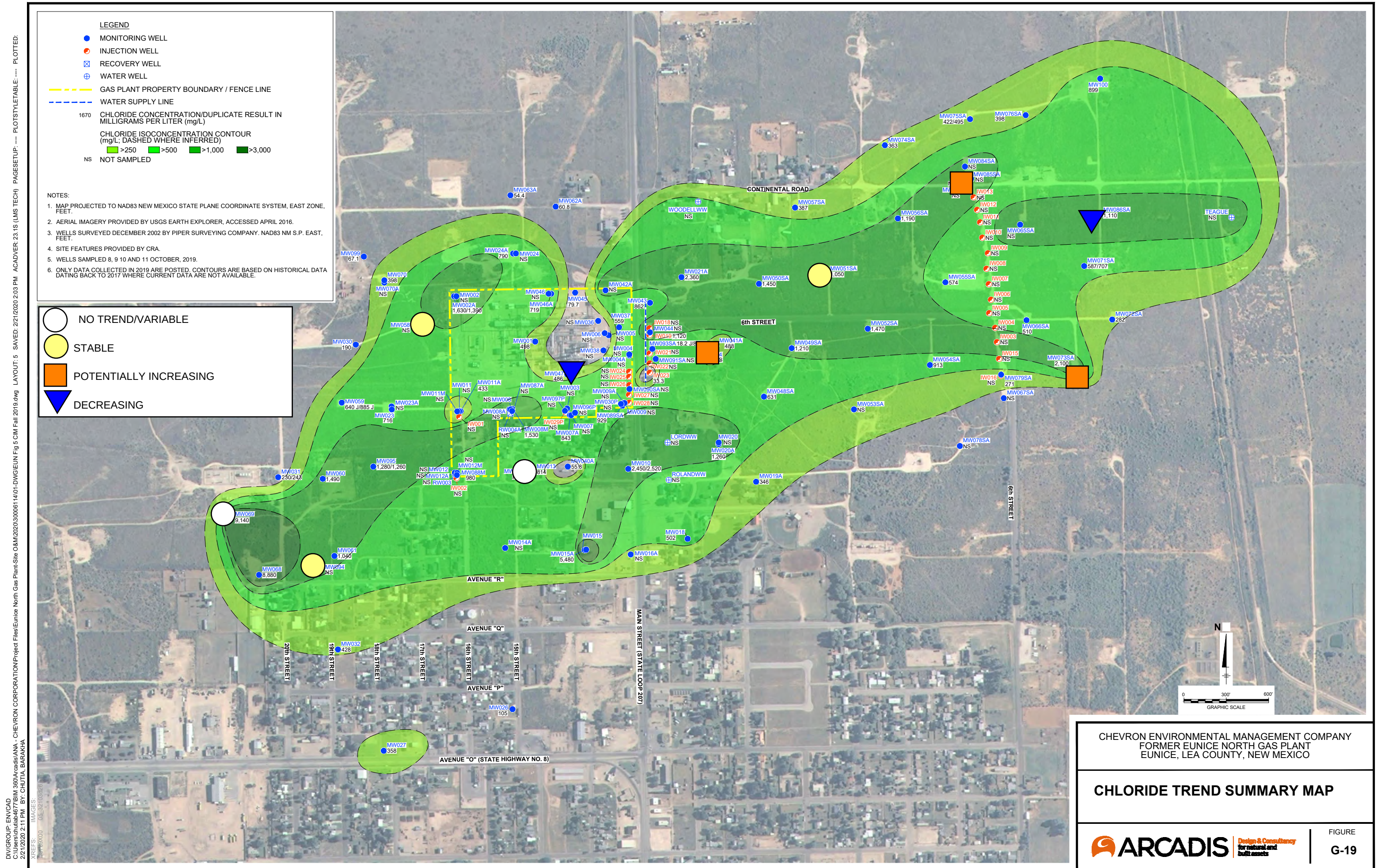
Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).



Concentration vs. Time Plot - Chloride in MW086SA (since 2017)
Eunice North, New Mexico

Figure G-17







Arcadis U.S., Inc.

630 Plaza Drive

Suite 100

Highlands Ranch, Colorado 80129

Tel 720 344 3500

Fax 720 344 3535

www.arcadis.com