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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

ARCADIS Design & Consultancy for natural and built assets

Chevron Environmental Management Company

# 2019 ANNUAL GROUNDWATER MONITORING REPORT

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

March 24, 2020



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# 2019 ANNUAL GROUNDWATER MONITORING REPORT

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

Prepared for:
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Date:
March 24, 2020

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# 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 |

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# 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.

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# 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.

- 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 D 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 NMQWCC Groundwater Standards established for DRO or GRO. Results are summarized in Tables 5 and 6.

### 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.

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.

- 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.

- 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.

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.

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# 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.

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# 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.

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# TABLES

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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:

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

**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

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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

ARCADIS Design & Consultancy for natural and built assets

| 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



Received by OCD: 3/25/2020 3:43:14 PM

Received by OCD: 3/25/2020 3:43:14 PM

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

ARCADIS Design & Consultancy for natural and built assets

| 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



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**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**

ARCADIS Design & Consultancy for natural and built assets

| 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 | | 0.0721 | J | 0.139 | | 3,310 | | 1,130 | J |
| IW019 | 4/16/2019 | FD | 0.0106 | J | 0.736 | | 0.698 | | 0.5 | U | 0.105 | | 3,190 | | 361 | J |
| IW023 | 4/16/2019 | REG | 0.00961 | | 0.345 | | 0.315 | | 0.0487 | J | 0.00282 | | 2,790 | | 765 | |
| IW024 | 4/16/2019 | REG | 0.0113 | | 1.21 | | 1.02 | | 0.321 | | 0.0288 | | 4,350 | | 817 | |
| MW001 | 4/17/2019 | REG | 0.00174 | J | 0.00142 | J | 0.01 | U | 0.1 | 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 U | **1.72** J | **1.26** | **3,690** | **957** |
| MW089SA | 4/17/2019 | REG | **0.0107** | **1.1** | **1.06** | 1 U | **0.00835** | **4,260** | **934** |
| MW090SA | 4/17/2019 | REG | **0.0096** | **0.265** | **0.31** | 0.1 U | **0.000728** J | **2,210** | **520** |
| MW093SA | 4/16/2019 | REG | **0.00811** | **0.405** | **0.365** | **0.0483** J | **0.244** | **3,220** | **984** |
| MW094 | 4/16/2019 | REG | **0.0108** | **1.53** | **1.88** J | **0.134** | **0.0141** | **3,860** | **1,070** |
| MW095 | 4/16/2019 | REG | **0.0093** | **3.77** | **3.46** J | **0.242** | **0.147** | **3,760** J | **1,500** |
| MW095 | 4/16/2019 | FD | **0.00823** | **3.97** | **3.54** | **0.239** | **0.126** | **5,320** J | **1,410** |
| MW097P | 4/16/2019 | REG | **0.0111** J | **0.479** | **0.36** | 0.5 U | **0.0557** | **3,480** | **1,010** |
| MW099 | 4/12/2019 | REG | **0.00744** | 0.004 U | 0.01 U | **0.0423** J | **0.18** | **453** | **73** |
| MW100 | 4/11/2019 | REG | **0.0106** | **0.00733** | 0.01 U | **0.36** | **0.299** | **1,900** | **948** |
| MW100 | 4/11/2019 | FD | **0.0106** | **0.00692** | 0.01 U | **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** | J | **0.00176** | J | 0.01 | U | 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** | J | **0.415** | | **0.378** | | 0.5 | U | 0.01 | U | **2,230** | | **635** | |
| MW007A | 10/11/2019 | REG | **0.0113** | J | **0.676** | | **0.592** | | 0.5 | U | **0.00257** | J | **2,980** | | **843** | |
| MW008M | 10/10/2019 | REG | **0.00362** | J | **0.00693** | | **0.0071** | J | **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** | J | **0.0304** | J | **0.00551** | | **9,970** | | **5,480** | |
| MW018 | 10/9/2019 | REG | **0.0103** | | 0.004 | U | 0.01 | U | 0.1 | U | **0.000437** | J | **1,650** | | **502** | |
| MW019A | 10/9/2019 | REG | **0.0103** | | **0.000533** | J | 0.01 | U | 0.1 | U | **0.00424** | | **1,200** | | **346** | |
| MW020A | 10/9/2019 | REG | **0.00988** | | **0.00604** | | **0.0063** | J | 0.1 | U | **0.000518** | J | **2,560** | | **1,260** | |
| MW021A | 10/10/2019 | REG | **0.0113** | | **0.00301** | J | 0.01 | U | **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 | U | 0.01 | U | 0.1 | U | **0.000348** | J | **741** | | **105** | |
| MW027 | 10/9/2019 | REG | **0.00685** | | **0.00107** | J | 0.01 | U | 0.1 | U | **0.000539** | J | **1,610** | | **358** | |
| MW030 | 10/8/2019 | REG | **0.0204** | | **0.00156** | J | 0.01 | U | **0.0382** | J | **0.000554** | J | **715** | | **190** | |
| MW031 | 10/9/2019 | FD | **0.055** | J | 0.004 | U | 0.01 | U | **2.08** | J | **0.818** | | **866** | | **243** | |
| MW031 | 10/9/2019 | REG | **0.0962** | J | 0.004 | U | **0.0057** | J | **4.93** | J | **0.833** | | **876** | | **230** | |
| MW032 | 10/9/2019 | REG | **0.00362** | J | **0.00407** | | **0.0035** | J | 0.1 | U | **0.000854** | J | **1,390** | | **428** | |
| MW037 | 10/10/2019 | REG | **0.0538** | | **0.00111** | J | **0.0131** | | **7.15** | | **0.0537** | J | **1,440** | | **559** | |
| MW040A | 10/10/2019 | REG | **0.02** | | **0.00312** | J | 0.01 | U | 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** | J | 0.01 | U | **0.257** | | **0.499** | J | **2,000** | | **862** | |
| MW045 | 10/10/2019 | REG | **0.00203** | J | **0.0103** | | 0.01 | U | 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** | J | **0.00379** | J | 0.01 | U | **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** | J |
| MW059 | 10/8/2019 | REG | **0.0136** | | **0.568** | | **0.523** | | 0.1 | U | 0.002 | U | **3,530** | | **640** | J |
| MW060 | 10/9/2019 | REG | **0.00492** | | 0.004 | U | 0.01 | U | **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** | J | 0.01 | U | 0.1 | U | 0.002 | U | **489** | | **60.8** | |
| MW063A | 10/8/2019 | REG | **0.0249** | | **0.00168** | J | 0.01 | U | 0.1 | U | **0.000251** | J | **484** | | **54.4** | |
| MW066SA | 10/8/2019 | REG | **0.0108** | | **0.00565** | | **0.0061** | J | 0.1 | U | **0.00819** | | **1,860** | | **510** | |
| MW068 | 10/9/2019 | REG | **0.017** | | 0.004 | U | 0.01 | U | **0.362** | | **2.01** | | **15,500** | | **8,880** | |
| MW069 | 10/9/2019 | REG | **0.00906** | | 0.004 | U | 0.01 | U | **0.1** | J | **0.293** | | **14,200** | | **9,140** | |
| MW070 | 10/8/2019 | REG | **0.0138** | | 0.004 | U | 0.01 | U | 0.1 | U | 0.002 | U | **1,220** | | **398** | |
| MW071SA | 10/8/2019 | FD | **0.00879** | | **0.0011** | J | 0.01 | U | **0.0251** | J | **0.284** | | **1,580** | | **707** | |
| MW071SA | 10/8/2019 | REG | **0.00874** | | **0.000795** | J | 0.01 | U | 0.1 | U | **0.273** | | **1,580** | | **587** | |
| MW072SA | 10/9/2019 | REG | **0.0189** | | 0.004 | U | 0.01 | U | 0.1 | U | **0.00204** | | **1,050** | | **282** | |
| MW073SA | 10/9/2019 | REG | **0.0119** | | 0.004 | U | 0.01 | U | 0.1 | U | **0.0104** | | **4,320** | | **2,100** | |
| MW074SA | 10/8/2019 | REG | **0.0153** | | **0.0058** | | **0.0061** | J | 0.1 | U | 0.002 | U | **1,640** | | **363** | |
| MW075SA | 10/8/2019 | FD | **0.0144** | | **0.0117** | | **0.01** | J | 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** | J | **0.0567** | J | **0.000831** | J | **1,890** | | **398** | |
| MW079SA | 10/9/2019 | REG | **0.00843** | | 0.004 | U | 0.01 | U | **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 | U | **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** | J |
| MW093SA | 10/10/2019 | REG | **0.0092** | | **0.547** | | **0.518** | | **0.0382** | J | **0.121** | J | **3,500** | | **18.2** | J |
| MW095 | 10/9/2019 | FD | **0.00914** | | **3.58** | | **3.11** | J | 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 | U | 0.01 | U | **0.0626** | J | **0.195** | | **486** | | **67.1** | |
| MW100 | 10/8/2019 | REG | **0.00952** | | **0.000802** | J | 0.01 | U | **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

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Eunice - <Base Image Feb 2019_2.jpg

FORMER EUNICE NORTH GAS PLANT

FORMER EUNICE SOUTH GAS PLANT

176

234

207

18

TEXAS AVENUE

DELAWARE BASIN ROAD

KING ROAD

0 1500' 3000'
GRAPHIC SCALE

AERIAL IMAGE PROVIDED BY GOOGLE™ EARTH PRO, IMAGE DATE 2/20/2019

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

# SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

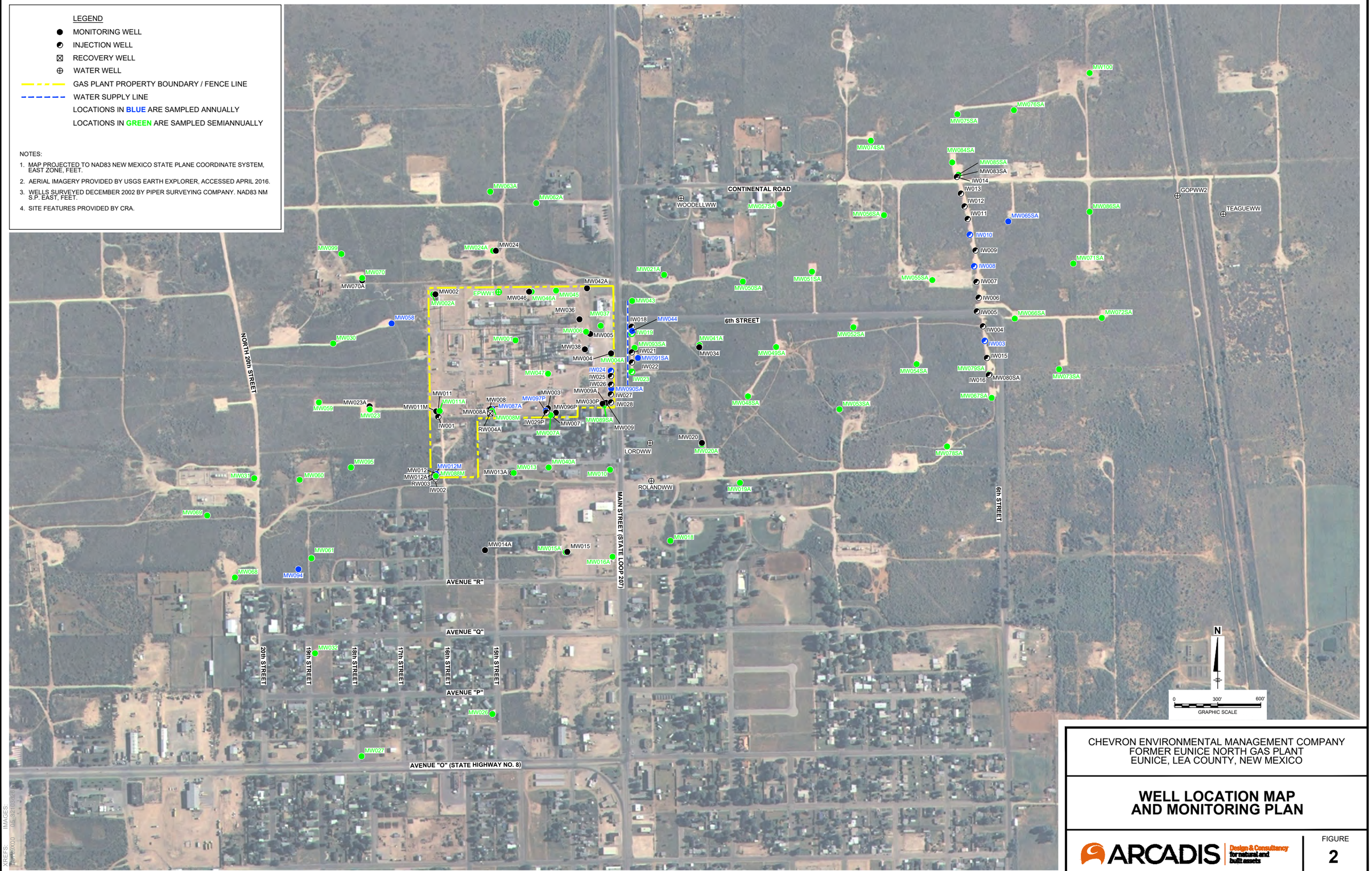
FIGURE
1

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- LOCATIONS IN **BLUE** ARE SAMPLED ANNUALLY
- LOCATIONS IN **GREEN** ARE SAMPLED SEMIANNUALLY

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.




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

# WELL LOCATION MAP AND MONITORING PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

DW/GROUP: ENVCAD
C:\Users\Pai0104\1BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3000611401-DWG\FIGURE 2 SITE MAP.dwg LAYOUT: 2 SAVED: 2/14/2020 1:29 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/6/2020
2:14 PM BY: ANJANEYAKUMAR, PAVAN KUMAR
XREFS:
IMAGES:
Aerial80X00 GE_32110836.tif

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- 3381.29 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (FT AMSL)
- 3380 POTENTIOMETRIC CONTOUR (FT AMSL; DASHED WHERE INFERRED)
- NG NOT GAUGED
- * NOT USED FOR CONTOURING
- GROUNDWATER FLOW DIRECTION

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 GAUGED APRIL 9-12 AND 15-17, 2019.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
MAIN STREET (STATE LOOP 207)
6th STREET
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET

N

0 300' 600'
GRAPHIC SCALE

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

# POTENTIOMETRIC SURFACE MAP SPRING 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY: SAN RAFAEL, CA DIV/GROUP: ENVCAD DB: J. HARRIS
C:\Users\Pal0104\1BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3000611401-DWG\Figure 3 - Potentiometric Surface Map Spring 2019.dwg LAYOUT: 3 SAVED: 2/21/2020 1:51 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ---- PLOTTED: 3/6/2020 2:19 PM BY: ANJANEYAKUMAR, PAVAN KUMAR
XREFS: IMAGES:

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- 1670 CHLORIDE CONCENTRATION/DUPLICATE RESULT IN MILLIGRAMS PER LITER (mg/L)
- CHLORIDE ISOCONCENTRATION CONTOUR (mg/L; DASHED WHERE INFERRED)
  - >250
  - >500
  - >1,000
  - >3,000
- 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.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
MAIN STREET (STATE LOOP 207)
6th STREET
TEAGUE

MW100 948 / 976
MW075SA 466
MW076SA 601
MW074SA 384
MW084SA NS
MW085SA NS
MW083SA NS
IW014 NS
IW013 NS
IW012 NS
IW011 NS
IW010 NS
IW009 NS
IW008 875
IW007 NS
IW006 NS
IW005 NS
IW004 NS
IW003 NS
IW015 NS
IW016 NS
MW086SA 1,370
MW065SA 1,050
MW071SA 636
MW072SA 218
MW066SA 836
MW073SA 1,000
MW079SA 271
MW067SA NS
MW078SA NS
MW063A 58.5
MW062A 62.9
WOODELLWW NS
MW057SA 357
MW056SA 1,120
MW055SA 653
MW050SA 1,420
MW051SA 1,220
MW021A 1,020
MW052SA 1,590
MW049SA 1,320
MW054SA 951
MW053SA NS
MW048SA 607
MW041A 461
MW034 NS
MW099 73
MW070 444
MW070A NS
MW024A 997
MW024 NS
MW002 NS
MW002A 1,430
MW046 NS
MW046A 745
MW042A NS
MW043 843
MW045 76 / 77
MW037 405
MW005 NS
MW004 NS
MW004A 550
MW058 1,150 / 1,040
MW036 NS
MW006 NS
MW038 NS
MW001 451
MW030 220
MW047 272
MW018 NS
MW019 1,130 J / 361 J
MW044 NS
MW093SA 984
IW021 NS
MW091SA NS
IW022 NS
IW023 765/1,060
IW024 817
IW025 NS
IW026 NS
MW090SA 520
IW027 NS
IW028 NS
MW009SA 934
MW009 NS
MW030P NS
MW096P NS
MW097P 1,010
MW087A 1,190
MW003 NS
MW008 NS
MW008A NS
MW011 NS
MW011A 511
MW011M NS
MW001 NS
MW059 891
MW023A NS
MW023 860
IW029P NS
MW007 NS
MW007A 792
MW008M 1,350
RW004A NS
MW095 1,500 / 1,410
MW012 NS
MW012A NS
RW003 NS
IW002 NS
MW012M 800
MW088M 957
MW013A NS
MW013 859
MW040A 56.4
MW010 2,380
LORDWW NS
MW020 NS
MW020A 1,320 / 1,060 J
ROLANDWW NS
MW019A 303
MW018 455
MW014A NS
MW015 NS
MW015A 4,250
MW016A NS
MW031 263
MW060 1,670
MW069 9,650
MW061 1,180
MW094 1,070
MW068 7,100
MW032 386 / 374
MW026 104
MW027 367

N

0 300' 600'
GRAPHIC SCALE

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

# CHLORIDE ISOCONCENTRATION MAP SPRING 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

DW/GROUP: ENVCAD
C:\Users\nadigera\8191\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3006114\01-DWG\EUN Fig 4 CUM Spring 2019.dwg LAYOUT: 4 SAVED: 2/14/2020 10:41 AM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/14/2020 10:42 AM BY: NADIGERA, CHIDAMBARA
XREFS: IMAGES:

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- 1670 CHLORIDE CONCENTRATION/DUPLICATE RESULT IN MILLIGRAMS PER LITER (mg/L)
- CHLORIDE ISOCONCENTRATION CONTOUR (mg/L; DASHED WHERE INFERRED)
  - >250
  - >500
  - >1,000
  - >3,000
- 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 8, 9 10 AND 11 OCTOBER, 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.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
MAIN STREET (STATE LOOP 207)
6th STREET
TEAGUE

N

0 300' 600'
GRAPHIC SCALE

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

# CHLORIDE ISOCONCENTRATION MAP FALL 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

DIV/GROUP: ENVCAD
C:\Users\chuliab4677\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3000611410\1-DWG\EUN Fig 5 CIM Fall 2019.dwg LAYOUT: 5 SAVED: 2/21/2020 2:03 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/21/2020 2:11 PM BY: CHUTIA, BARAKHA
XREFS: IMAGES:

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- 2.54 TOTAL CHROMIUM CONCENTRATION/DUPLICATE RESULT IN MILLIGRAMS PER LITER (mg/L)
- TOTAL CHROMIUM ISOCONCENTRATION CONTOUR (mg/L; DASHED WHERE INFERRED)
  - >0.05
  - >0.5
  - >2
- J THE TARGET ANALYTE WAS POSITIVELY IDENTIFIED BELOW THE QUANTITATION LIMIT AND ABOVE THE DETECTION LIMIT
- <0.004 U NOT DETECTED ABOVE REPORTING LIMIT
- 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.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
MAIN STREET (STATE LOOP 207)
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET

MW100 0.00733 / 0.00692
MW075SA 0.0128
MW076SA 0.0119
MW074SA 0.00508
MW084SA 0.0205
MW085SA 0.0559
MW083SA NS
MW086SA 0.0482
MW065SA 0.0134
TEAGUE NS
MW071SA 0.00587
MW072SA <0.004 U
MW073SA <0.004 U
MW066SA 0.0179
MW067SA NS
MW078SA NS
MW063A 0.0016 J
MW062A 0.002 J
WOODELLWW NS
MW057SA 0.0385
MW056SA 0.382
MW051SA 0.779
MW050SA 0.329
MW055SA 0.177
MW052SA 0.246
MW049SA 0.2
MW054SA 0.122
MW053SA NS
MW048SA 0.396
MW099 <0.004 U
MW070 <0.004 U
MW070A NS
MW024A 0.5
MW024 NS
MW046A 1.49
MW046 NS
MW042A NS
MW045 0.012 / 0.0111
MW002 NS
MW002A 0.889
MW021A 0.00295 J
MW043 0.000894 J
MW058 3.16 / 3.25
MW030 0.00126 J
MW036 NS
MW037 0.00116 J
MW006 NS
MW005 NS
MW001 0.00142 J
MW038 NS
MW004 NS
MW004A 0.558
MW047 0.0809
MW044 NS
MW019 0.672 / 0.736
MW093SA 0.405
MW021 NS
MW041A 0.201
MW034 NS
MW091SA NS
MW022 NS
MW023 0.345/0.00511 J
MW024 NS
MW025 NS
MW026 NS
MW090SA 0.265
MW027 NS
MW026 NS
MW059 0.46
MW023A NS
MW023 2.22
MW011 NS
MW011A 0.159
MW011M NS
MW008 NS
MW008A NS
MW067A 0.0423
MW008M 0.0071
MW097P 0.479
MW003 NS
MW009A NS
MW030P NS
MW096P NS
MW009 NS
MW089SA 1.1
MW007 NS
MW029P NS
RW004A NS
MW007A 0.711
LORDWW NS
MW020 NS
MW020A 0.0056 J / 0.00511 J
MW031 <0.004 U
MW060 0.00195 J
MW095 3.77 / 3.97
MW012 NS
MW012A NS
RW003 NS
IW002 NS
MW012M 0.0306
MW088M 0.138
MW013A NS
MW040A 0.00285 J
MW010 0.0273
MW013 2.54
ROLANDWW NS
MW019A 0.000853 J
MW069 <0.02 U
MW081 1.38
MW068 <0.02 U
MW094 1.53
MW014A NS
MW015 NS
MW015A 0.00983 J
MW016A NS
MW018 <0.004 U
MW032 0.00473 J / 0.00505
MW026 <0.004 U
MW027 0.00139 J
MW014 NS
MW083SA NS
IW013 NS
IW012 NS
IW011 NS
IW010 0.00202 J
IW009 NS
IW008 0.00388 J
IW007 NS
IW006 NS
IW005 NS
IW004 NS
IW003 0.0088
IW015 NS
MW079SA 0.00103 J
IW016 NS

N

0 300' 600'
GRAPHIC SCALE

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

# DISSOLVED CHROMIUM ISOCONCENTRATION MAP SPRING 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

DW/GROUP: ENVCAD
C:\Users\nadigera\81911BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3006114\01-DWG\EUN Fig 6 DCIM Spring 2019.dwg LAYOUT: 6 SAVED: 2/14/2020 1:31 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 2/17/2020 3:38 PM BY: NADIGERA, CHIDAMBARA
XREFS: IMAGES:

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE

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

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

>0.05 >0.5 >2

J THE TARGET ANALYTE WAS POSITIVELY IDENTIFIED BELOW THE QUANTITATION LIMIT AND ABOVE THE DETECTION LIMIT

<0.004 U NOT DETECTED ABOVE REPORTING LIMIT

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 8, 9, 10 AND 11 OCTOBER, 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.

CONTINENTAL ROAD

6th STREET

NORTH 20th STREET

20th STREET

19th STREET

18th STREET

17th STREET

16th STREET

15th STREET

AVENUE "R"

AVENUE "Q"

AVENUE "P"

AVENUE "O" (STATE HIGHWAY NO. 8)

MAIN STREET (STATE LOOP 207)

N

0 300' 600'

GRAPHIC SCALE

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

# DISSOLVED CHROMIUM ISOCONCENTRATION MAP FALL 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

DW/GROUP: ENVCAD
C:\Users\nadigera81911\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3006114\01-DWG\EUN Fig 7 DCIM Fall 2019.dwg LAYOUT: 7 SAVED: 2/14/2020 12:19 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/14/2020 12:23 PM BY: NADIGERA, CHIDAMBARA
XREFS: IMAGES:

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.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET
MAIN STREET (STATE LOOP 207)
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)

MW100 < 0.01 U/ <0.01 U
MW075SA 0.0094 J
MW076SA 0.0143
MW074SA <0.01 U
MW084SA 0.0167
MW085SA 0.0236
MW083SA NS
MW086SA 0.0385
MW065SA 0.0069 J
TEAGUE NS
MW071SA <0.01 U
MW072SA 0.0065 J
MW072SA <0.01 U
MW073SA <0.01 U
MW078SA NS
MW079SA <0.01 U
MW067SA NS
MW054SA 0.117
MW055SA 0.157
MW056SA <0.01 U
MW057SA 0.0343
MW051SA 0.733
MW050SA 0.29
MW052SA 0.224
MW049SA 0.176
MW048SA 0.363
MW053SA NS
MW041A 0.175
MW034 NS
MW093SA 0.365
MW091SA NS
MW090SA 0.31
MW089SA 1.06
MW063A <0.01 U
MW062A <0.01 U
MW099 <0.01 U
MW070 <0.01 U
MW070A NS
MW024A 0.474
MW024 NS
MW002A 0.0089 J
MW002 NS
MW046A 1.73
MW046 NS
MW045 <0.01 U / <0.01 U
MW042A NS
MW043 <0.01 U
MW021A <0.01 U
MW058 2.74 / 2.9
MW030 <0.01 U
MW001 <0.01 U
MW036 NS
MW037 <0.01 U
MW006 NS
MW005 NS
MW004 NS
MW038 NS
MW004A 0.459
MW047 0.0709
MW003 NS
MW009A NS
MW097P 0.36
MW096P NS
MW009 NS
MW059 0.40
MW023A NS
MW023 2.07
MW001M NS
MW008 NS
MW008A NS
MW087A 0.0049 J
MW008M 0.0043 J
MW011A <0.01 U
MW001 NS
RW004A NS
MW007 NS
MW007A 0.66
MW095 3.46 J / 3.54
MW031 <0.01 U
MW060 <0.01 UJ
MW012M <0.01 U
MW088M <0.01 U
MW012A NS
RW003 NS
IW002 NS
MW069 <0.01 U
MW061 1.51 J
MW068 <0.01 U
MW064 1.88 J
MW032 <0.01 UJ / <0.01 U
MW025 <0.01 UJ
MW027 <0.01 UJ
MW014A NS
MW015A <0.01 UJ
MW015 NS
MW016A NS
MW013A NS
MW013 2.22 J
MW040A <0.01 UJ
MW010 0.0213
MW020 NS
MW020A <0.01 U / <0.01 UJ
MW019A <0.01 U
MW018 <0.01 U
WOODELLWW NS
LORDWW NS
ROLANDWW NS
IW001 NS
IW002 NS
IW003 <0.01 U
IW004 NS
IW005 NS
IW006 NS
IW007 NS
IW008 <0.01 U
IW009 NS
IW010 <0.01 U
IW011 NS
IW012 NS
IW013 NS
IW014 NS
IW015 NS
IW016 NS
IW018
IW019 0.664 / 0.698
IW021 NS
IW022 NS
IW023 0.315/<0.01 U
IW026 NS
IW027 NS
IW028
IW029P NS
1.02 NS
0.737

N

0 300' 600'
GRAPHIC SCALE

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

# DISSOLVED HEXAVALENT CHROMIUM ISOCONCENTRATION MAP SPRING 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 8

DIV/GROUP: ENVCAD
C:\Users\nadigera\191BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\30006114\01-DWG\EUN Fig 8 DHCIM Spring 2019.dwg LAYOUT: 8 SAVED: 2/14/2020 1:31 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/17/2020 3:39 PM BY: NADIGERA, CHIDAMBARA
XREFS:
IMAGES:

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 8, 9, 10 AND 11 OCTOBER, 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.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
MAIN STREET (STATE LOOP 207)
6th STREET

MW100 <0.01 U
MW075SA 0.013/0.011 J
MW076SA 0.0074 J
MW074SA 0.0061 J
MW084SA 0.0204
MW085SA 0.0318
MW083SA NS
IW014 NS
IW013 NS
IW012 NS
IW011 NS
IW010 NS
IW009 NS
IW008 NS
IW007 NS
IW006 NS
IW005 NS
IW004 NS
IW003 NS
IW015 NS
IW016 NS
MW086SA 0.067
MW065SA NS
TEAGUE NS
MW071SA <0.01 U [<0.01 U]
MW066SA 0.0061
MW072SA <0.01 U
MW073SA <0.01 U
MW079SA <0.01 U
MW067SA NS
MW078SA NS
MW063A <0.01 U
MW062A <0.01 U
WOODELLWW NS
MW057SA 0.0398
MW056SA 0.312
MW051SA 0.658
MW050SA 0.355
MW055SA 0.169
MW052SA 0.239
MW049SA 0.187
MW054SA 0.114
MW053SA NS
MW048SA 0.36
MW099 <0.01 U
MW070 <0.01 U
MW070A NS
MW024A 0.457
MW024 NS
MW046A 2.19
MW042A NS
MW045 <0.01 U
MW002A 0.758/0.79
MW002 NS
MW046 NS
MW058 NS
MW030 <0.01 U
MW036 NS
MW037 0.0131
MW006 NS
MW005 NS
MW001 <0.01 U
MW038 NS
MW004 NS
MW004A NS
MW047 <0.01 U
MW021A <0.01 U
MW043 <0.01 U
IW018 NS
MW044 NS
IW019 0.609
MW093SA 0.518/0.528
MW041A 0.178
IW021 NS
MW091SA NS
MW034 NS
IW022 NS
IW023 0.312
IW024 NS
IW025 NS
IW026 NS
MW003 NS
MW090SA NS
IW027 NS
MW030P NS
IW028 NS
MW008 NS
MW089SA 1.15
MW097P NS
MW096P NS
MW007 NS
MW007A 0.592
MW011A 0.0834
MW011 NS
MW011M NS
MW008A NS
MW008A 2.3
MW008A NS
MW006M 0.0071 J
RW004A NS
IW029P NS
IW001 NS
MW059 0.523/0.524
MW023A NS
MW023 2.32
MW095 3.02/3.11 J
MW031 0.0057 J/<0.01 U
MW060 <0.01 U
MW069 <0.01 U
MW068 <0.01 U
MW094 NS
MW061 1.15
MW027 <0.01 U
MW032 0.0035 J
MW025 <0.01 U
MW012 NS
MW012M NS
MW072A NS
RW003 NS
MW088M <0.01 U
IW002 NS
MW013A NS
MW013 1.75
MW040A <0.01 U
MW010 0.088/0.0135
ROLANDWW NS
MW019A <0.01 U
LORDWW NS
MW020 NS
MW020A 0.0063 J
MW014A NS
MW015A 0.0048 J
MW015 NS
MW016A NS
MW018 <0.01 U

N

0 300' 600'
GRAPHIC SCALE

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

# DISSOLVED HEXAVALENT CHROMIUM ISOCONCENTRATION MAP FALL 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 9

DIV/GROUP: ENVCAD
C:\Users\chutiab4677\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3000611401-DWG\EUN Fig 9 DHCIM Fall 2019.dwg LAYOUT: 9 SAVED: 2/17/2020 3:40 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/21/2020 2:07 PM BY: CHUTIA, BARAKHA
XREFS:
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# 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

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# ATTACHMENT 1

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# 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.



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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



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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



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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.



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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;



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- 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.



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**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.



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- 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.



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**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. Gulder
Company Representative - print name

Company Representative - Signature

Title: Manager OE/HBS

Date: 01/23/2012



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# APPENDIX B

## Geologic Cross SectionsNMOCD Discharge Permit GW-004

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- ABANDONED WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- A——A' CROSS SECTION LOCATION
- LOCATIONS IN **ORANGE** ARE SAMPLED SEMI-ANNUALLY
- LOCATIONS IN **BLUE** ARE SAMPLED ANNUALLY
- LOCATIONS IN **BLACK** ARE NOT SAMPLED OR GAUGED

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 AND JANUARY 12, 2017 BY WEST COMPANY. NAD83 NM S.P. EAST, FEET.
4. SITE FEATURES PROVIDED BY CRA.

CONTINENTAL ROAD
6th STREET
NORTH 20th STREET
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET
MAIN STREET (STATE LOOP 207)
WOODELLWW
LORDWW
ROLANDWW
GOPWW2
TEAGUEWW
EPWW1
A
A'
B
B'
0 300' 600'
GRAPHIC SCALE

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

**CROSS SECTION LOCATION MAP**

ARCADIS Design & Consultancy for natural and built assets

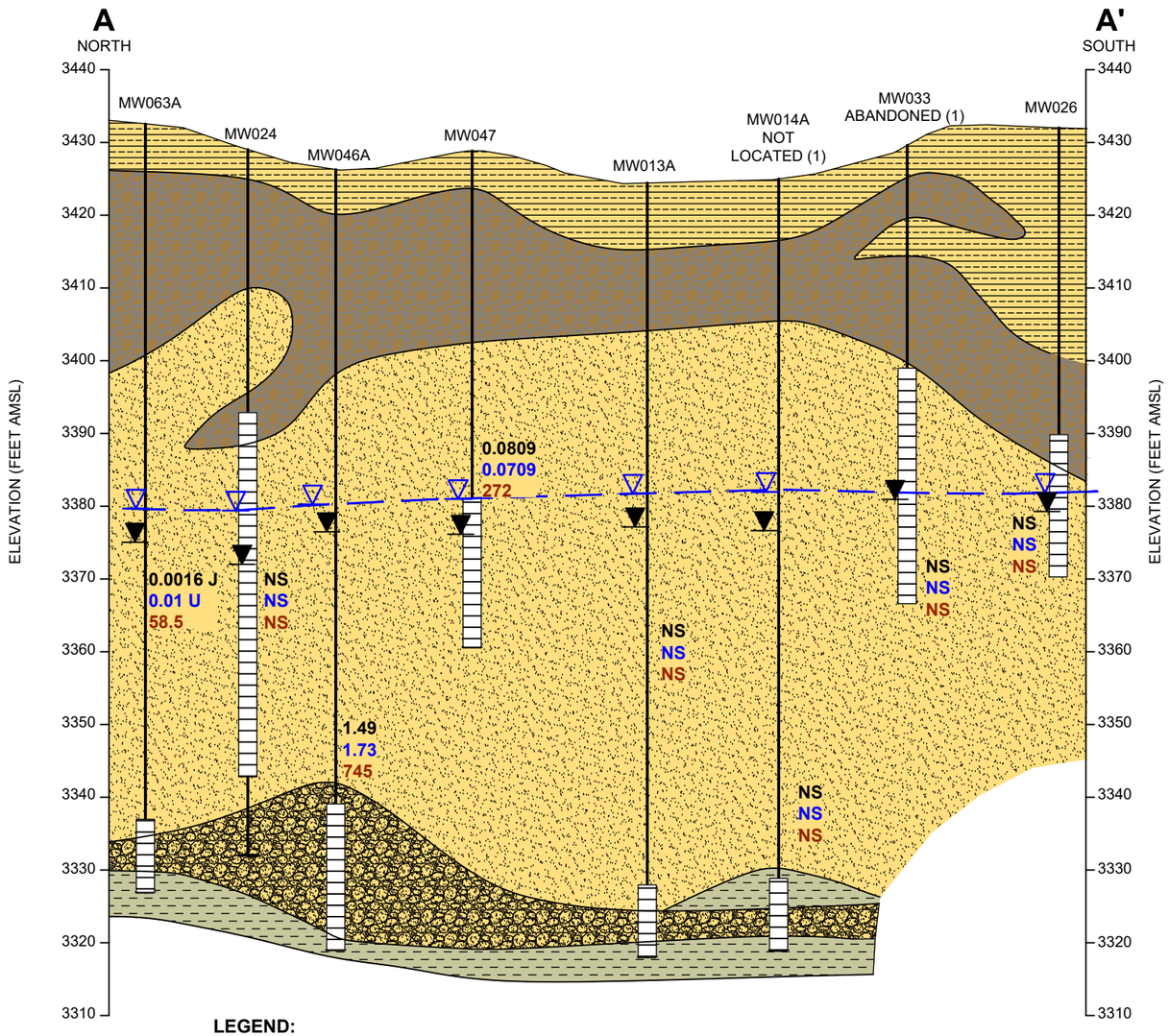
FIGURE 1

CITY: SAN RAFAEL, CA DIV/GROUP: ENV/CAD DB: J. HARRIS
C:\Users\jlharris\Desktop\ENV\CAD\B0048789\0000\0004\AI\SAP\DWG\48789B02.dwg LAYOUT: 1 SAVED: 3/7/2017 9:57 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/7/2017 10:10 AM BY: HARRIS, JESSICA
XREFS: IMAGES:

Received by OCD: 3/25/2020 3:43:14 PM

Received by OCD: 3/25/2020 3:43:14 PM

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**LEGEND:**

MW063A WELL/BORING ID

APPROXIMATE GROUND SURFACE

LITHOLOGIC CONTACT

WATER LEVEL (SPRING 2019)

WATER LEVEL ENCOUNTERED AFTER DRILLING

WELL SCREEN

WELL/BORING BOTTOM

CLAY

CALICHE

INTERBEDDED SAND AND SANDSTONE

SILTY, CLAYEY SAND

SANDY GRAVEL

**1.49** SPRING 2019 DISSOLVED TOTAL CHROMIUM CONCENTRATION (mg/L)
**1.73** SPRING 2019 DISSOLVED HEXAVALENT CHROMIUM CONCENTRATION (mg/L)
**745** SPRING 2019 CHLORIDE CONCENTRATION (mg/L)

NS NOT SAMPLED IN 2019

J ESTIMATED VALUE

U NON-DETECT

(1) WATER LEVEL IS ESTIMATED

0 20' 40'
APPROXIMATE VERTICAL SCALE

0 600' 1,200'
APPROXIMATE HORIZONTAL SCALE

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

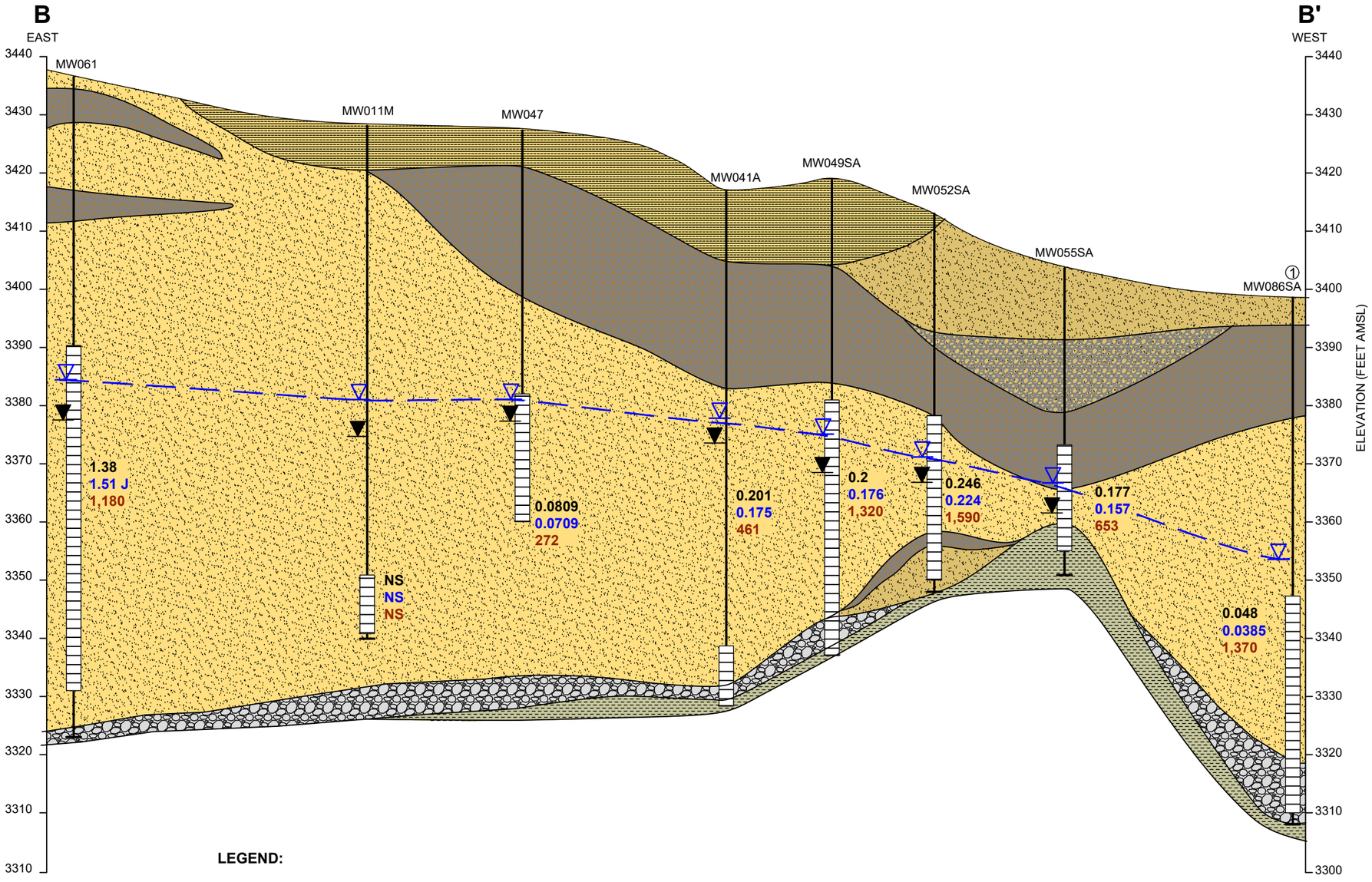
**GEOLOGIC CROSS-SECTION A-A'**

ARCADIS Design & Consultancy for natural and built assets

FIGURE
**A-A'**

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(B.ALTOM) LD:(C.SMITH) PIC:(M.FLEISCHNER) PM:(L.MINER) TM:(J.FRIZZELL)
C:\Users\wbernd\ARCADIS.US\BIM 360\Documents\AAA-CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site SI\2019\3006114\01-DWG\EUNICE NORTH SECT V01.dwg LAYOUT: A-A' SAVED: 11/27/2019 1:59 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE:
PLTFULL.CTB PLOTTED: 11/27/2019 3:45 PM BY: BERNDSEN, WENDY

Received by OCD: 3/25/2020 3:43:14 PM




**LEGEND:**

- MW063A — WELL/BORING ID
- APPROXIMATE GROUND SURFACE
- LITHOLOGIC CONTACT
- WATER LEVEL (SPRING 2019)
- WATER LEVEL ENCOUNTERED AFTER DRILLING
- WELL SCREEN
- WELL/BORING BOTTOM

- CALICHE
- CLAY
- SAND
- INTERBEDDED SAND AND SANDSTONE
- CLAYEY SAND
- GRAVEL
- SAND WITH CALICHE

**0.206** SPRING 2019 DISSOLVED TOTAL CHROMIUM CONCENTRATION (mg/L)
**0.184** SPRING 2019 DISSOLVED HEXAVALENT CHROMIUM CONCENTRATION (mg/L)
**390** SPRING 2019 CHLORIDE CONCENTRATION (mg/L)

NS NOT SAMPLED IN 2016
J ESTIMATED VALUE
U NON-DETECT
① ESTIMATED GROUND SURFACE ELEVATION

0 20' 40'
APPROXIMATE VERTICAL SCALE

0 600' 1,200'
APPROXIMATE HORIZONTAL SCALE

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**

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) DB:(B.ALTOM) LD:(C.SMITH) PIC:(M.FLEISCHNER) PM:(L.MINER) TM:(J.FRIZZELL)
C:\Users\wdbern\dg\ARCADIS-US\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site SI\2019\3006114\01-DWG\EUNICE NORTH SECT V01.dwg LAYOUT: B-B SAVED: 11/27/2019 1:59 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE:
PLTFULL.CTB PLOTTED: 11/27/2019 3:48 PM BY: BERNDGEN, WENDY

Received by OCD: 3/25/2020 3:43:14 PM

# 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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**Eunice, Lea County, New Mexico**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

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

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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**Eunice, Lea County, New Mexico**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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 |

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**Former Eunice North Gas Plant**
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ARCADIS Design & Consultancy for natural and built assets

| 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 |

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

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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**

ARCADIS Design & Consultancy for natural and built assets

| 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

ARCADIS Design & Consultancy for natural and built assets

# 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)<br>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.

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.

**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 matries.

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.

### 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

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% |

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% |

| 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



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# Chain of Custody

Work Order No: 6208604

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
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| | | | |
|---|---|---|---|
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**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:

| | | | |
|---|---|---|---|
| Project Name: | Eunice Project-N. Eunice | Turn Around | |
| Project Number: | 30048789 | Routine ☑ | |
| P.O. Number: | 30048789 | Rush: | |
| Sampler's Name: | Jerry Stowsard | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Temperature (°C): | 2.6/2.5 | Thermometer ID | |
| Received Intact: | Yes No | R8 | |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW100 | W | 04/11/19 | 0759 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW076SA | | | 0846 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW075SA | | | 0924 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW084SA | | | 0941 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW085SA | | | 1008 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW086SA | | | 1032 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW071SA | | | 1140 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW065SA | | | 1230 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW066SA | | | 1253 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW073SA | W | 04/11/19 | 1318 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**ANALYSIS REQUEST**

**Work Order Notes**

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

**Sample Comments**

**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 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

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 Jerry Stowsard | Winston Nobl | 4/11/19 16:17 | 2 | | 4/11/19 18:20 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

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# 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) www.xenco.com

Work Order No: 620864

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| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Terry S. Hayward | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.1 0.5 | Thermometer ID | RE |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

ANALYSIS REQUEST

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW07-25A | W | 04/11/19 | 1338 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DUP8 | W | 04/11/19 | — | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | Terry S. Hayward | Preston Nail | 4/11/19 16:17 | 2 | | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

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# 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 |

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# Chain of Custody

Work Order No: 621021

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ 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: | 30048758 | Routine | ☒ |
| P.O. Number: | 30048789 | Rush: | |
| Sampler's Name: | Jeremy S. Longwell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Temperature (°C): | 5.1 5.0 | Thermometer ID | R8 |
| Received Intact: | Yes No | | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No N/A | Total Containers: | |

**ANALYSIS REQUEST**

**Work Order Notes**

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IW010 | W | 4/12/19 | 0955 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| IW008 | W | 4/12/19 | 0920 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| MW005S5A | W | 4/12/19 | 0951 | | 9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| MW074SA | 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 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 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 Jeremy S. Longwell | | 4.12.19 1605 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.006
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# 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 |

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# 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) www.xenco.com

Work Order No: 621022

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: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ 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: | Boo48789 | Routine ☑ | |
| P.O. Number: | Boo48789 | Rush: | |
| Sampler's Name: | Ryan Nunn | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Temperature (°C): | 5.1 / 5.0 | Thermometer ID | |
| Received Intact: | Yes No | R8 | |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW062A | W | 4-12-19 | 1000 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW063A | W | 4-12-19 | 1040 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW024A | W | 4-12-19 | 1110 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW099 | W | 4-12-19 | 1150 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW070 | W | 4-12-19 | 1330 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW030 | W | 4-12-19 | 1355 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| DUP06 | W | 4-12-19 | — | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW058 | W | 4-12-19 | 1420 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |

RV 4-12-19 Same Container

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | | | 4.12.19 1605 | 2 | | | |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.006
Page 22 of 25

# 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 |

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# Chain of Custody

Work Order No: 621177

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) www.xenco.com

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| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Jerry S. Longwell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 0-3/0.2 | 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW0575A | W | 04/15/19 | 0824 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW0493 | W | 04/15/19 | 0853 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW0505A | W | 04/15/19 | 0826 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW0515A | W | 04/15/19 | 0824 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| ~~MW0551A~~ MW0785A | W | 04/15/19 | 0949 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| IW003 | W | 04/15/19 | 1001 | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 04/15/19 | 4/15/19 | 4/15/19 | 2 4/15/19 | | 4/15/19 1657 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.005
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# 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 |

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# Chain of Custody

XENCO LABORATORIES
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 Craslbad, 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

Work Order No: 621180

Page 1 of 1

| | | | |
|---|---|---|---|
| Project Manager: | Brett Krahbiel | 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.krahbiel@arcadis.com |

**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:

| | | | |
|---|---|---|---|
| Project Name: | Eunice Project-N. Eunice | Turn Around | |
| Project Number: | 80048789 | Routine ☑ | |
| Project Location | 80048789 | Rush: | |
| Sampler's Name: | Ryan Manny | 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 | | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | |
| Sample Custody Seals: | Yes No N/A | Total Containers: | |

| Lab ID | Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | Pres. Code | Hex Chrome (SW 7196A) | Dissolved Metals (6020: Dis: Arsenic, Manganese, Iron) | TDS (SW 2540), Chloride (E300) | ANALYSIS REQUEST | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW023 | W | 4-15-19 | 1410 | NA | 3 | | 1 | 1 | 1 | | |
| | MW059 | W | 4-15-19 | 1430 | NA | 3 | | 1 | 1 | 1 | | |
| | MW031 | W | 4-15-19 | 1450 | NA | 3 | | 1 | 1 | 1 | | |
| | MW069 | W | 4-15-19 | 1515 | NA | 3 | | 1 | 1 | 1 | | |
| | MW068 | W | 4-15-19 | 1537 | NA | 3 | | 1 | 1 | 1 | | |

**Preservative Codes**

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied 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 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

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|---|
| 1 | | | 4/15/19 1730 | 2 | | | |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date 022619 Rev. 2019.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.002
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# 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 | J~~D~~ | 5 |
| Iron | 7439-89-6 | <0.114 | 0.500 | 0.114 | mg/L | 04.22.2019 13:11 | U~~D~~ | 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 | U~~D~~ | 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 | J~~D~~ | 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 | U~~D~~ | 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 |

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# Chain of Custody

Work Order No: 621298

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
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Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Holder | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | R8 |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

**ANALYSIS REQUEST**

**Work Order Notes**

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) | 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 | | | ✓ | ✓ | ✓ | ✓ | |
| MW404 | 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 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

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | Winston Noel | 4/16/19 16:20 | 2 | | 4/16/19 1830 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.005

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# Chain of Custody

Work Order No: 621298

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



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Hedden | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | RS |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW010 | W | 4-16 | 1249 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW037 | W | 4-16 | 1303 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW004A | W | 4-16 | 1334 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| IW024 | W | 4-16 | 1353 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| Dup 4 | W | 4-16 | — | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| Dup 7 | W | 4-16 | — | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | | Winston Kee | 4/16/19 16:20 | 2 | | | 4/16/19 1830 |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |



Received by OCD: 3/25/2020 3:43:14 PM
Final 1.005
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# 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 | ~~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~~ 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 | ~~U~~ 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~~ UJ | 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 | 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 | J~~D~~ J | 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 | U~~D~~ U | 5 |
| Manganese | 7439-96-5 | <0.000993 | 0.0100 | 0.000993 | mg/L | 04.22.2019 17:45 | U~~D~~ 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 | ~~U~~ 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 | ~~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 |

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# Chain of Custody

Work Order No: 621300

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Jerry Longwell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | R8 |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

ANALYSIS REQUEST

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW054SA | W | 04/16/19 | 0749 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW052SA | W | 4/16/19 | 0816 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW049SA | W | 4/16/19 | 0831 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW048SA | W | 4/16/19 | 0843 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW041A | W | 4/16/19 | 0859 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| EW019 | W | 4/16/19 | 0946 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW093SA | W | 4/16/19 | 1123 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| EW023 | W | 4/16/19 | 1210 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW020A | W | 4/16/19 | 1229 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| DUP01 | W | 4/16/19 | | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|
| 1 | Jerry Longwell | Winton Neel | 4/16/19 16:20 | 2 | | 4/16/19 1830 |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

Revised Date 051418 Rev. 2018.1

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Final 1.007

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# 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) www.xenco.com

Work Order No: 621300

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: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Jerry Schoonmaker | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | R8 |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW018A | W | 4/16/19 | 1255 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| ~~MW023A~~ MW018 | W | 4/16/19 | 1317 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW027P | W | 4/16/19 | 1345 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| DUP03 | W | 4/16/19 | — | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|
| 1 | Jerry Schoonmaker | Winston Noel | 4/16/19 16:20 | 2 | | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

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# 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 J | 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 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 | 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 | 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 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 U | 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 J | 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 U | 5 |
| **Manganese** | 7439-96-5 | **0.00123** | 0.0100 | 0.000993 | mg/L | 04.22.2019 13:34 | 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 | ~~UK~~ U | 1 |

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# Chain of Custody

Work Order No: 602491

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)
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| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Holder | Due Date: | |

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

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~MW040A~~ MW090SA | W | 4-17 | 0746 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW089SA | W | 4-17 | 0800 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW007A | W | 4-17 | 0816 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW047 | W | 4-17 | 0832 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW001 | W | 4-17 | 0853 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW002A | W | 4-17 | 0922 | | 3 | ✓ | | ✓ | ✓ | ✓ | ✓ |
| MW046A | W | 4-17 | 0950 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW045 | W | 4-17 | 1008 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW012M | W | 4-17 | 1218 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW088M | W | 4-17 | 1229 | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | Winston | 4/17/19 16:48 | 4 | | 4/17/19 16:48 |
| 3 | | | 6 | | |
| 5 | | | | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
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# Chain of Custody

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Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
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Work Order No: 602481



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Holder | Due Date: | |

| SAMPLE RECEIPT | Temp Blank: | Yes No | Wet Ice: | Yes No |
|---|---|---|---|---|
| Temperature (°C): | | 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 of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Arsenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW087A | W | 4-17 | 1246 | | 3 | | | ✓ | — | — | ✓ |
| MW008m | W | 4-17 | 1257 | | | | | ✓ | — | — | ✓ |
| MW011A | W | 4-17 | 1313 | | | | | ✓ | ✓ | — | ✓ |
| MW057SA | W | 4-17 | 1334 | | | | | ✓ | ✓ | ✓ | ✓ |
| Dup 05 | W | 4-17 | — | | 8 | ✓ | ✓ | ✓ | ✓ | — | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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**

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | Winston Nee | 4/17/19 16:45 | 2 | | 4/17/19 18:00 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.004
Page 38 of 41

# 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 | U~~D~~ | 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 | U~~D~~ | 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 | U~~D~~ | 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 | U~~D~~ | 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 | ~~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 U | 2 |
| **Manganese** | 7439-96-5 | **0.000420** | 0.00400 | 0.000397 | mg/L | 04.24.2019 17:13 | JD J | 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,



**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): *620864*

Report 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<br>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 | 0.197 | 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<br>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 | 0.0389 | 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<br>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 | 0.0389 | 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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Dissolved Metals by SW6020A<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 | 636 | 250 | 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<br>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 | 7.11 | 25.0 | 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<br>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 | 0.173 | 87 | 0.200 | 0.175 | 88 | 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 # :** 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<br>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 | 0.187 | 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<br>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 | 0.0106 | 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*(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 #:** 620864

**Lab Batch #:** 3085484 **Project ID:** B0048789
**Date Analyzed:** 04.12.2019 12:50 **Date Prepared:** 04.12.2019 **Analyst:** SPC
**QC- Sample ID:** 620864-001 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 1900 | 2000 | 5 | 10 | |

**Lab Batch #:** 3085484
**Date Analyzed:** 04.12.2019 12:50 **Date Prepared:** 04.12.2019 **Analyst:** SPC
**QC- Sample ID:** 620864-011 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

Work Order No: 6208604

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) 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: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Jerry S. Longsworth | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Temperature (°C): | 2.6/2.5 | Thermometer ID | R8 |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW100 | W | 04/11/19 | 0759 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW076SA | | | 0846 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW075SA | | | 0924 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW084SA | | | 0941 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW085SA | | | 1008 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW086SA | | | 1032 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW071SA | | | 1140 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW065SA | | | 1230 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW066SA | | | 1253 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW073SA | W | 04/11/19 | 1318 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 Jerry S. Longsworth | Winston Nobl | 4/11/19 16:17 | 2 | | 4/11/19 18:20 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

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# 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)
www.xenco.com

Work Order No: 620864

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 |

**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:

| | | | |
|---|---|---|---|
| Project Name: | Eunice Project-N. Eunice | Turn Around | |
| Project Number: | 30048789 | Routine | ☑ |
| P.O. Number: | 30048789 | Rush: | |
| Sampler's Name: | Terry Stanzell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.1 0.5 | Thermometer ID | RE |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

ANALYSIS REQUEST

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW072SA | W | 04/11/19 | 1338 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DUP8 | W | 04/11/19 | — | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | Terry Stanzell | Preston Nail | 4/11/19 16:17 | 2 | | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

Revised Date 051418 Rev. 2018.1

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Final 1.004
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# Inter-Office Shipment



**IOS Number : 126578**

Date/Time: 04.12.2019 09:12
Lab# From: **Midland**
Lab# To: **Houston**
Created by: Katie Lowe
Delivery Priority:
Air Bill No.: 774963040703
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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | MW076SA | 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 | MW075SA | 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 | MW084SA | 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 | MW085SA | 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 | MW086SA | 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 | MW071SA | 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 | MW065SA | 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 | MW066SA | 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 | MW073SA | 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 | MW072SA | 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
Date Relinquished: 04.12.2019

Received By: Taha Hedib
Date Received: 04.13.2019 09:40
Cooler Temperature: 3.8

# XENCO Laboratories

## 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:** _____ Date: 04/13/2019

Taha Hedib

# 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,



**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): *621021*

Report 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<br>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 | 27.5 | 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<br>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 | 0.0375 | 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:** B0048789

**Analyst:** CHE **Date Prepared:** 04.15.2019 **Date Analyzed:** 04.15.2019

**Lab Batch ID:** 3086275 **Sample:** 3086275-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

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

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | <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 **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<br>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 | 18.1 | 25.0 | 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<br>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 | 3.24 | 25.0 | 29.9 | 107 | 25.0 | 30.0 | 107 | 0 | 90-110 | 20 | |

**Lab Batch ID:** 3085768 **QC- Sample ID:** 621021-005 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<br>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 | 0.169 | 85 | 0.200 | 0.170 | 85 | 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 # :** 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<br>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 | <0.000246 | 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 **Project ID:** B0048789

**Date Analyzed:** 04.15.2019 15:42 **Date Prepared:** 04.15.2019 **Analyst:** CHE

**QC- Sample ID:** 621021-001 D **Batch #:** 1 **Matrix:** Water

**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 3120 | 3160 | 1 | 10 | |

**Lab Batch #:** 3086275

**Date Analyzed:** 04.15.2019 15:42 **Date Prepared:** 04.15.2019 **Analyst:** CHE

**QC- Sample ID:** 621022-006 D **Batch #:** 1 **Matrix:** Water

**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

Work Order No: 621021

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ 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: | 30048758 | Routine | ☒ |
| P.O. Number: | 30048789 | Rush: | |
| Sampler's Name: | Jeremy S. Longwell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Temperature (°C): | 5.1 5.0 | Thermometer ID | R8 |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IW010 | W | 4/12/19 | 0955 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| IW008 | W | 4/12/19 | 0920 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW005S5A | W | 4/12/19 | 0951 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW074SA | W | 4/12/19 | 1011 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW021A | W | 4/12/19 | 1034 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 Jeremy S. Longwell | | 4.12.19 1605 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |



Received by OCD: 3/25/2020 3:43:14 PM
Final 1.006
Page 18 of 21

# Inter-Office Shipment



**IOS Number : 126643**

| | | | | | |
|---|---|---|---|---|---|
| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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

Brianna Teel

Date Relinquished: 04.15.2019

Received By:

Taha Hedib

Date Received: 04.16.2019 09:20

Cooler Temperature: 4.9

# XENCO Laboratories

## 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:** _____ Date: 04/16/2019

Taha Hedib

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**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

Brandi Ritcherson

# 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,



**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): *621022*

Report 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<br>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 | 27.5 | 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<br>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 | 0.0389 | 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:** B0048789

**Analyst:** CHE **Date Prepared:** 04.15.2019 **Date Analyzed:** 04.15.2019

**Lab Batch ID:** 3086275 **Sample:** 3086275-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

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

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | <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<br>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 | 18.1 | 25.0 | 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<br>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 | 3.24 | 25.0 | 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<br>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 | 0.187 | 94 | 0.200 | 0.187 | 94 | 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 # :** 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<br>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 | <0.000246 | 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 **Project ID:** B0048789
**Date Analyzed:** 04.15.2019 15:42 **Date Prepared:** 04.15.2019 **Analyst:** CHE
**QC- Sample ID:** 621021-001 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 3120 | 3160 | 1 | 10 | |

**Lab Batch #:** 3086275
**Date Analyzed:** 04.15.2019 15:42 **Date Prepared:** 04.15.2019 **Analyst:** CHE
**QC- Sample ID:** 621022-006 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# 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) www.xenco.com

Work Order No: 621022

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: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ 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: | Boo48789 | Routine ☑ | |
| P.O. Number: | Boo48789 | Rush: | |
| Sampler's Name: | Ryan Nunn | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Temperature (°C): | 5.1 / 5.0 | Thermometer ID | |
| Received Intact: | Yes No | R8 | |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW062A | W | 4-12-19 | 1000 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW063A | W | 4-12-19 | 1040 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW024A | W | 4-12-19 | 1110 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW099 | W | 4-12-19 | 1150 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW070 | W | 4-12-19 | 1330 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW030 | W | 4-12-19 | 1355 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| DUP06 | W | 4-12-19 | — | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |
| MW058 | W | 4-12-19 | 1420 | NA | 8 | 3 | 2 | 1 | 1 | 1 | 1 |

RV 4-12-19 Same Container

**ANALYSIS REQUEST**

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | | | 4.12.19 1605 | 2 | | | |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.006
Page 22 of 25

# 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

Date Relinquished: 04.15.2019

Received By:

Taha Hedib

Date Received: 04.16.2019 09:20

Cooler Temperature: 4.9

# XENCO Laboratories

## 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:** _____ Date: 04/16/2019

Taha Hedib

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**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,



**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): *621177*

Report 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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| BTEX by EPA 8021B<br>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 | 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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Chloride by EPA 300<br>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 | 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 **Sample:** 3086366-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Chromium, Hexavalent by SW 7196A<br>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 | 0.0370 | 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 **Sample:** 7676022-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Dissolved Metals by SW6020A<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Sample:** 3086376-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:** B0048789

**Analyst:** ARM **Date Prepared:** 04.27.2019 **Date Analyzed:** 04.27.2019

**Lab Batch ID:** 3087222 **Sample:** 7676726-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

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

| TPH By SW8015 Mod<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **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<br>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<br>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 # :** 621177 **Project ID:** B0048789

**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<br>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 | X |

**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<br>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 **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<br>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 | <0.000246 | 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<br>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 | 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*(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 #:** 621177

**Lab Batch #:** 3086376 **Project ID:** B0048789
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621177-001 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 1500 | 1550 | 3 | 10 | |

**Lab Batch #:** 3086376
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621177-006 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

Work Order No: 621177

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | 30048785 | Routine ☑ | |
| P.O. Number: | 30048785 | Rush: | |
| Sampler's Name: | Jerry S. Longwell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 0-3/0.2 | 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW0575A | W | 04/15/19 | 0824 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW0493 | W | 04/15/19 | 0853 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW0505A | W | 04/15/19 | 0826 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW0515A | W | 04/15/19 | 0824 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| ~~MW0551A~~ MW0785A | W | 04/15/19 | 0949 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW0083 | W | 04/15/19 | 1001 | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 04/15/19 | 4/15/19 | 4/15/19 | 2 4/15/19 | | 4/15/19 1657 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.005
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# 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: Katie Lowe

Date Relinquished: 04.16.2019

Received By: Monica Shakhshir

Date Received: 04.17.2019 09:45

Cooler Temperature: 2.1

# XENCO Laboratories

## 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:** _____ Date: 04/17/2019

Monica Shakhshir

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**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,



**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): *621180*

Report 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<br>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 | 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<br>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 | 0.0383 | 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:** B0048789

**Analyst:** SPC **Date Prepared:** 04.19.2019 **Date Analyzed:** 04.19.2019

**Lab Batch ID:** 3086376 **Sample:** 3086376-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

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

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:** B0048789

**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<br>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 | |

**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<br>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 | X |

**Lab Batch ID:** 3086368 **QC- Sample ID:** 621180-005 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<br>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 | 0.162 | 81 | 0.200 | 0.162 | 81 | 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 # :** 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<br>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 | <0.00246 | 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 **Project ID:** B0048789
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621177-001 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 1500 | 1550 | 3 | 10 | |

**Lab Batch #:** 3086376
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621177-006 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

XENCO LABORATORIES
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 Craslbad, 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

Work Order No: 621180

Page 1 of 1

| | | | |
|---|---|---|---|
| Project Manager: | Brett Krahbiel | 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.krahbiel@arcadis.com |

**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:

| | | | |
|---|---|---|---|
| Project Name: | Eunice Project-N. Eunice | Turn Around | |
| Project Number: | 80048789 | Routine ☑ | |
| Project Location | 80048789 | Rush: | |
| Sampler's Name: | Ryan Manny | 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 | | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | |
| Sample Custody Seals: | Yes No N/A | Total Containers: | |

**ANALYSIS REQUEST**

**Preservative Codes**

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

| Lab ID | Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | Pres. Code | Hex Chrome (SW 7196A) | Dissolved Metals (6020: Dis: Arsenic, Manganese, Iron) | TDS (SW 2540), Chloride (E300) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW023 | W | 4-15-19 | 1410 | NA | 3 | | 1 | 1 | 1 | |
| | MW059 | W | 4-15-19 | 1430 | NA | 3 | | 1 | 1 | 1 | |
| | MW031 | W | 4-15-19 | 1450 | NA | 3 | | 1 | 1 | 1 | |
| | MW069 | W | 4-15-19 | 1515 | NA | 3 | | 1 | 1 | 1 | |
| | MW068 | W | 4-15-19 | 1537 | NA | 3 | | 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 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 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 | | | 4/15/19 1730 | 2 | | | |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date 022619 Rev. 2019.1

Received by OCD: 3/25/2020 3:43:14 PM
Final 1.002
Page 18 of 21

# Inter-Office Shipment



**IOS Number : 37121**

Date/Time: 04.16.2019 11:17
Lab# From: **Midland**
Lab# To: **Houston**
Created by: Katie Lowe
Delivery Priority:
Air Bill No.: 774988048270

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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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
Date Relinquished: 04.16.2019

Received By: Monica Shakhshir
Date Received: 04.17.2019 09:45
Cooler Temperature: 2.1

# XENCO Laboratories

## 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:** _____ Date: 04/17/2019

Monica Shakhshir

# 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,



**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): *621298*

Report 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<br>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<br>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<br>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<br>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<br>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 :** 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<br>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<br>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<br>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<br>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<br>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 **Sample:** 7676070-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| BTEX by EPA 8021B<br>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 | 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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Chloride by EPA 300<br>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 | 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<br>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 | 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<br>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 | 0.0374 | 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<br>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 | 0.0363 | 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 **Project ID:**

**Analyst:** DEP **Date Prepared:** 04.19.2019 **Date Analyzed:** 04.19.2019

**Lab Batch ID:** 3086438 **Sample:** 7676150-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Dissolved Metals by SW6020A<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Date Analyzed:** 04.19.2019

**Lab Batch ID:** 3086376 **Sample:** 3086376-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 6.00 | 1000 | 989 | 99 | 1000 | 987 | 99 | 0 | 80-120 | 10 | |

**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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:**

**Analyst:** ARM **Date Prepared:** 04.17.2019 **Date Analyzed:** 04.17.2019

**Lab Batch ID:** 3086104 **Sample:** 7675991-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

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

| TPH By SW8015 Mod<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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<br>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] | 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 | 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] | 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 | 56.4 | 125 | 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] | 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 | 607 | 500 | 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<br>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 | 0.124 | 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<br>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 | 0.0213 | 0.200 | 0.224 | 101 | 0.200 | 0.224 | 101 | 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 # :** 621298 **Project ID:**

**Lab Batch ID:** 3086438 **QC- Sample ID:** 621298-001 S **Batch #:** 1 **Matrix:** Water

**Date Analyzed:** 04.19.2019 **Date Prepared:** 04.19.2019 **Analyst:** DEP

**Reporting Units:** mg/L

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

| Dissolved Metals by SW6020A<br>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<br>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 **Project ID:**
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621177-001 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 1500 | 1550 | 3 | 10 | |

**Lab Batch #:** 3086376
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621177-006 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 2410 | 2390 | 1 | 10 | |

**Lab Batch #:** 3086383
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621298-010 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 481 | 490 | 2 | 10 | |

**Lab Batch #:** 3086383
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621300-004 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

Work Order No: 621298

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Holder | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | R8 |
| 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 | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | ✓ | ✓ | ✓ | ✓ |
| MW004A | W | 4-16 | 1235 | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | Winston Noel | 4/16/19 16:20 | 2 | | 4/16/19 1830 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |



Received by OCD: 3/25/2020 3:43:14 PM
Final 1.005
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# Chain of Custody

Work Order No: 621298

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Hedden | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | RS |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW010 | W | 4-16 | 1249 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW037 | W | 4-16 | 1303 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW004A | W | 4-16 | 1334 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| IW024 | W | 4-16 | 1353 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| Dup 4 | W | 4-16 | — | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| Dup 7 | W | 4-16 | — | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | | Winston Kee | 4/16/19 16:20 | 2 | | |
| 3 | | | | 4 | | 4/16/19 1830 |
| 5 | | | | 6 | | |



Received by OCD: 3/25/2020 3:43:14 PM
Final 1.005
Page 38 of 41

# Inter-Office Shipment



**IOS Number : 37228**

Date/Time: 04.17.2019 10:22
Lab# From: **Midland**
Lab# To: **Houston**
Created by: Katie Lowe
Delivery Priority:
Air Bill No.: 775000129282

Please send report to: John Builes
Address: 1211 W. Florida Ave
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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_DIS | 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_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
Date Relinquished: 04.17.2019

Received By: Travis Simmons
Date Received: 04.18.2019 10:00
Cooler Temperature: 1.2

# XENCO Laboratories

## 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

Travis Simmons

# 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,



**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): *621300*

Report 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<br>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<br>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<br>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<br>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<br>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 :** 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<br>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<br>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<br>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<br>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<br>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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| BTEX by EPA 8021B<br>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 | 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:** 04.23.2019 **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<br>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 | 25.8 | 103 | 25.0 | 25.7 | 103 | 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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Chloride by EPA 300<br>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 | |

**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<br>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 | 0.0363 | 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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Chromium, Hexavalent by SW 7196A<br>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 | 0.0360 | 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:** B0048789

**Analyst:** ARM **Date Prepared:** 04.17.2019 **Date Analyzed:** 04.17.2019

**Lab Batch ID:** 3086104 **Sample:** 7675991-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

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

| TPH By SW8015 Mod<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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:** 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<br>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 | 56.4 | 125 | 197 | 112 | 125 | 189 | 106 | 4 | 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 # :** 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] | 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 | 607 | 500 | 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] | 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 | 6.93 | 25.0 | 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] | 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 | 13.8 | 25.0 | 39.1 | 101 | 25.0 | 38.9 | 100 | 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 # :** 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<br>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 | 0.0213 | 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<br>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 | 0.175 | 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<br>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 | <0.00246 | 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<br>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 #:** 621300

**Lab Batch #:** 3086383 **Project ID:** B0048789
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621298-010 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 481 | 490 | 2 | 10 | |

**Lab Batch #:** 3086383
**Date Analyzed:** 04.19.2019 15:00 **Date Prepared:** 04.19.2019 **Analyst:** SPC
**QC- Sample ID:** 621300-004 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 1860 | 1850 | 1 | 10 | |

**Lab Batch #:** 3086388
**Date Analyzed:** 04.19.2019 16:00 **Date Prepared:** 04.19.2019 **Analyst:** CHE
**QC- Sample ID:** 621300-014 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 2140 | 2150 | 0 | 10 | |

**Lab Batch #:** 3086388
**Date Analyzed:** 04.19.2019 16:00 **Date Prepared:** 04.19.2019 **Analyst:** CHE
**QC- Sample ID:** 621481-010 D **Batch #:** 1 **Matrix:** Water
**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

Work Order No: 621300

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) www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Jerry Longwell | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | R8 |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

**ANALYSIS REQUEST**

**Work Order Notes**

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW054SA | W | 04/16/19 | 0749 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| MW052SA | W | 4/16/19 | 0816 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| MW049SA | W | 4/16/19 | 0831 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| MW048SA | W | 4/16/19 | 0843 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| MW041A | W | 4/16/19 | 0859 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| EW019 | W | 4/16/19 | 0946 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| MW093SA | W | 4/16/19 | 1123 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| EW023 | W | 4/16/19 | 1210 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| MW020A | W | 4/16/19 | 1229 | | 3 | | | ✓ | ✓ | ✓ | ✓ | |
| DUP01 | W | 4/16/19 | — | | 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 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 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 | Jerry Longwell | Winton Neal | 4/16/19 16:20 | 2 | | |
| 3 | | | | 4 | | 4/16/19 1830 |
| 5 | | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.007

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# 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) www.xenco.com

Work Order No: 621300

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| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | 30048789 | Rush: | |
| Sampler's Name: | Jerry Schoonmaker | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No |
| Temperature (°C): | 2.3/2.2 | Thermometer ID | R8 |
| Received Intact: | (Yes) No | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.1 |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW018A | W | 4/16/19 | 1255 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| ~~MW018A~~ MW018 | W | 4/16/19 | 1317 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW097P | W | 4/16/19 | 1345 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| DUP03 | W | 4/16/19 | — | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|
| 1 | Jerry Schoonmaker | Winston Noel | 4/16/19 16:20 | 2 | | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

Revised Date 051418 Rev. 2018.1

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# Inter-Office Shipment



**IOS Number : 37229**

Date/Time: 04.17.2019 10:24
Lab# From: **Midland**
Lab# To: **Houston**
Created by: Katie Lowe
Delivery Priority:
Air Bill No.: 775000129282

Please send report to: John Builes
Address: 1211 W. Florida Ave
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 | MW09935A | 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
Date Relinquished: 04.17.2019

Received By: Travis Simmons
Date Received: 04.18.2019 10:00
Cooler Temperature: 1.2

# XENCO Laboratories

## 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

Travis Simmons

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**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,



**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): *621481*

Report 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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| BTEX by EPA 8021B<br>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

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| Chloride by EPA 300<br>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<br>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 | 0.0388 | 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<br>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 | 0.0379 | 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 **Project ID:**

**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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 18.5 | 1000 | 990 | 99 | 1000 | 992 | 99 | 0 | 80-120 | 10 | |

**Analyst:** ARM **Date Prepared:** 04.21.2019 **Date Analyzed:** 04.21.2019

**Lab Batch ID:** 3086492 **Sample:** 7676242-1-BKS **Batch #:** 1 **Matrix:** Water

**Units:** mg/L

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| TPH By SW8015 Mod<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 | 0.0913 | 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<br>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 | 6.93 | 25.0 | 32.5 | 102 | 25.0 | 32.0 | 100 | 2 | 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 # :** 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<br>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 | 13.8 | 25.0 | 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<br>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 | 0.187 | 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<br>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 | 0.179 | 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<br>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 | 0.00960 | 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<br>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 | 99.8 | 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 **Project ID:**

**Date Analyzed:** 04.19.2019 16:00 **Date Prepared:** 04.19.2019 **Analyst:** CHE

**QC- Sample ID:** 621300-014 D **Batch #:** 1 **Matrix:** Water

**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| Total Dissolved Solids | 2140 | 2150 | 0 | 10 | |

**Lab Batch #:** 3086388

**Date Analyzed:** 04.19.2019 16:00 **Date Prepared:** 04.19.2019 **Analyst:** CHE

**QC- Sample ID:** 621481-010 D **Batch #:** 1 **Matrix:** Water

**Reporting Units:** mg/L

**SAMPLE / SAMPLE DUPLICATE RECOVERY**

| TDS by SM2540C<br>Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
|---|---|---|---|---|---|
| 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

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# Chain of Custody

Work Order No: 602491

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)
www.xenco.com



| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | | Routine ☒ | |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Holder | Due Date: | |

| SAMPLE RECEIPT | Temp Blank: | Yes No | Wet Ice: | Yes No |
|---|---|---|---|---|
| Temperature (°C): | | 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 of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Aresenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~MW040A~~ MW090SA | W | 4-17 | 0746 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW089SA | W | 4-17 | 0800 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW007A | W | 4-17 | 0816 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW047 | W | 4-17 | 0832 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW001 | W | 4-17 | 0853 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW002A | W | 4-17 | 0922 | | 3 | ✓ | | ✓ | ✓ | ✓ | ✓ |
| MW046A | W | 4-17 | 0950 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW045 | W | 4-17 | 1008 | | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MW012M | W | 4-17 | 1218 | | 3 | | | ✓ | ✓ | ✓ | ✓ |
| MW088M | W | 4-17 | 1229 | | 3 | | | ✓ | ✓ | ✓ | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | Winston | 4/17/19 16:48 | 4 | | 4/17/19 |
| 3 | | | 6 | | |
| 5 | | | | | |



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# Chain of Custody

Work Order No: 621481

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)
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| | | | |
|---|---|---|---|
| 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 ☐ RRC ☐ 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: | | Routine | ☒ |
| P.O. Number: | | Rush: | |
| Sampler's Name: | Chas Holder | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No | |
| Temperature (°C): | | 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 of Containers | BTEX (SW8021) | TPH (SW8015) | Hex Chrome (SW7196A) | Dissolved Metals (SW6020_DIS): Arsenic, Maganese, Iron & Chromium | TDS (SW2540) | Chlorides (E300) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW087A | W | 4-17 | 1246 | | 3 | | | ✓ | — | — | — |
| MW008m | W | 4-17 | 1257 | | | | | ✓ | — | — | — |
| MW011A | W | 4-17 | 1313 | | | | | ✓ | ✓ | — | ✓ |
| MW057SA | W | 4-17 | 1334 | | | | | ✓ | ✓ | ✓ | ✓ |
| Dup 05 | W | 4-17 | — | | 8 | ✓ | ✓ | ✓ | ✓ | — | ✓ |

**Work Order Notes**

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

**Sample Comments**

**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 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 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 | Winston Nee | 4/17/19 16:45 | 2 | | 4/17/19 18:00 |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

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# 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 | MW090SA | 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 | MW089SA | 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 | MW056SA | 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

Date Relinquished: 04.19.2019

Received By: Travis Simmons

Travis Simmons

Date Received: 04.19.2019 09:40

Cooler Temperature: 2.2

# XENCO Laboratories

## 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

Travis Simmons

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**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

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 598697

**Send Results to:**

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: Jerry S. Longwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | | |
|---|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | | |
| # of Containers | 21 | 14 | 14 | 14 | 14 | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW001-W-180911 | 09/11/18 | 1150 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW046A-W-180911 | 09/11/18 | 1220 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW045-W-180911 | 09/11/18 | 1226 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW037-W-180911 | 09/11/18 | 1248 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW043-W-180911 | 09/11/18 | 1346 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| TW019-W-180911 | 09/11/18 | 1317 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW100-W-180911 DUP | 09/11/18 | 1347 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW076SA-W-180911 DUP | | 1402 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW075SA-W-180911 | | 1412 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW034SA-W-180911 | | 1423 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW035SA-W-180911 | | 1432 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW086SA-W-180911 DUP | | 1447 | | X | W | — | — | 1 | 1 | 1 | | | |
| DUP03-W-180911 | 09/11/18 | — | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| DUP07-W-180911 | 09/11/18 | — | | X | W | — | — | 1 | 1 | 1 | | | |

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**Laboratory Information and Receipt**

Lab Name: Xenco
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard TAT
Shipping Tracking #:
Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt: Condition/Cooler Temp: 0.3/0.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry S. Longwell | Printed Name: Winston Wood | Printed Name: Winston Wood | Printed Name: Julian Martinez |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 09/11/18 1632 | Date/Time: 09/11/18 16:59 | Date/Time: 09/11/18 | Date/Time: 9-11-18 19:00 |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.001

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# 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: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order # 698921

**Send Results to:**

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: Jerry Silongwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | | |
|---|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | | |
| # of Containers | | | 19 | 19 | 19 | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW071SA-W-180912 | 9/12/18 | 0911 | | X | W | | | 1 | 1 | 1 | | | |
| MW074SA-W-180912 | 9/12/18 | 0926 | | X | W | | | 1 | 1 | 1 | | | |
| MW056SA-W-180912 | 9/12/18 | 0940 | | X | W | | | 1 | 1 | 1 | | | |
| MW055SA-W-180912 | 9/12/18 | 0954 | | X | W | | | 1 | 1 | 1 | | | |
| MW066SA-W-180912 | 9/12/18 | 1005 | | X | W | | | 1 | 1 | 1 | | | |
| MW073SA-W-180912 | 9/12/18 | 1016 | | X | W | | | 1 | 1 | 1 | | | |
| MW072SA-W-180912 | 9/12/18 | 1135 | | X | W | | | 1 | 1 | 1 | | | |
| MW021A-W-180912 | 9/12/18 | 1149 | | X | W | | | 1 | 1 | 1 | | | |
| MW050SA-W-180912 | 9/12/18 | 1159 | | X | W | | | 1 | 1 | 1 | | | |
| MW051SA-W-180912 | 9/12/18 | 1211 | | X | W | | | 1 | 1 | 1 | | | |
| MW028SA-W-180912 | 9/12/18 | 1225 | | X | W | | | 1 | 1 | 1 | | | |
| MW054SA-N-180912 | 9/12/18 | 1242 | | X | W | | | 1 | 1 | 1 | | | |
| DUP04-W-180912 | 9/12/18 | | | X | W | | | 1 | 1 | 1 | | | |
| DUP05-W-180912 | 9/12/18 | — | | X | W | | | 1 | 1 | 1 | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco
☑ Cooler packed with ice (✓)
Special Turnaround Requirements: 5 Business Days TAT
Shipping Tracking #:

Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact
Sample Receipt: R80.030
Condition/Cooler Temp: 3.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry Silongwell | Printed Name: Winston Nod | Printed Name: Winston Nod | Printed Name: Katie Lave |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 09/12/18 1708 | Date/Time: 09/12/18 17:08 | Date/Time: 09/12/18 19:00 | Date/Time: 9/12/18 19:00 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #: 598921

**Send Results to:**

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: Jerry Skonycznyl
Sampler's Signature:

| Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | |
| # of Containers | | | 3 | 4 | 4 | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW057SA-W-180912 | 9/12/18 | 1809 | | X | W | | | 1 | 1 | 1 | | | |
| MW048SA-W-180912 | 9/12/18 | 1320 | | X | W | | | 1 | 1 | 1 | | | |
| MW049SA-W-180912 | 9/12/18 | 1332 | | X | W | | | 1 | 1 | 1 | | | |
| MW041A-W-180912 | 9/12/18 | 1347 | | X | W | | | 1 | 1 | 1 | | | |
| MW062A-W-180912 | 9/12/18 | 1803 | | X | W | | | 1 | 1 | 1 | | | |
| MW043A-W-180912 | 9/12/18 | 1814 | | X | W | | | 1 | 1 | 1 | | | |
| MW074A-W-180912 | 9/12/18 | 1443 | | X | W | | | 1 | 1 | 1 | | | |
| MW070-W-180912 | 9/12/18 | 1502 | | X | W | | | 1 | 1 | 1 | | | |
| DUP02-W-180912 | 9/12/18 | — | | X | W | | | 1 | 1 | 1 | | | |

**Special Instructions/Comments:** MW057SA-W-180912 9/12/18 11:35

☐ **Special QA/QC Instructions(✓):**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 1 | 1 | | | |

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: Xenco | Cooler Custody Seal (✓) ☑ Intact ☐ Not Intact | Printed Name: Jerry S. Lonzarich | Printed Name: Winston Nod | Printed Name: Winston Nod | Printed Name: |
| ☑ Cooler packed with ice (✓) | | Signature: | Signature: | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Sample Receipt: R80.030 | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: 3.0 | Date/Time: 09/12/18 1708 | Date/Time: 09/12/18 17:08 | Date/Time: 09/12/18 19:00 | Date/Time: |

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# 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0112** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0179** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00822** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0116** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00709** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0107** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0108** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00707** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0131** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0116** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0119** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0103** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0240** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0233** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0125** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0145** | 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order # 590178

**Send Results to:**

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: Gary S. Longwell

Sampler's Signature:

| Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | |
| # of Containers | | | | | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW088M-W-180913 | 9/13/18 | 1447 | | X | W | | | 1 | 1 | 1 | |
| MW013-W-180913 | 9/13/18 | 1434 | | X | W | | | 1 | 1 | 1 | |
| MW084DA-W-180913 | 9/13/18 | 1429 | | X | W | | | 1 | 1 | 1 | |
| MW010-W-180913 | 9/13/18 | 1421 | | X | W | | | 1 | 1 | 1 | |
| MW019A-W-180913 | 9/13/18 | 1409 | | X | W | | | 1 | 1 | 1 | |
| MW018-W-180913 | 9/13/18 | 1346 | | X | W | | | 1 | 1 | 1 | |
| MW020A-W-180913 | 9/13/18 | 1400 | | X | W | | | 1 | 1 | 1 | |
| MW099-W-180913 | 9/13/18 | 1321 | | X | W | | | 1 | 1 | 1 | |
| MW015A-W-180913 | 9/13/18 | 1289 | | X | W | | | 1 | 1 | 1 | |
| MW026-W-180913 | 9/13/18 | 1239 | | X | W | | | 1 | 1 | 1 | |
| MW027-W-180913 | 9/13/18 | 1229 | | X | W | | | 1 | 1 | 1 | |
| MW032-W-180913 | 9/13/18 | 1213 | | X | W | | | 1 | 1 | 1 | |
| MW068-W-180913 | 9/13/18 | 1144 | | X | W | | | 2 | 1 | 1 | |
| MW061-W-180913 | 9/13/18 | 1132 | | X | W | | | 1 | 1 | 1 | |

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco

☐ Cooler packed with ice (✓)

Specify Turnaround Requirements: Standard TAT

Shipping Tracking #:

Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact

Sample Receipt: 190.03.0

Condition/Cooler Temp: 3.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Gary Longwell | Printed Name: Winston Abbey | Printed Name: Winston Abbey | Printed Name: Brianna Teel |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 9/14/18 1657 | Date/Time: 09/13/18 16:57 | Date/Time: 09/13/18 1900 | Date/Time: 9/13/18 1900 |

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Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #: 599078

**Send Results to:**

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: Jerry Silvergueil
Sampler's Signature:

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix |
|---|---|---|---|---|---|
| MW095-W-180913 | 9/13/18 | 1117 | | X | W |
| MW030-W-180913 | 9/13/18 | 0958 | | X | W |
| MW031-W-180913 | 9/13/18 | 1030 | | X | W |
| MW060-W-180913 | 9/13/18 | 1003 | | X | W |
| MW059-W-180913 | 9/13/18 | 1010 | | X | W |
| MW069-W-180913 | 9/13/18 | 1041 | | X | W |
| MW023-W-180913 | 9/13/18 | 1020 | | X | W |

| | B | B | C | E | E |
|---|---|---|---|---|---|
| Preservative | | | | | |
| Filtered (✓) | | | ✓ | ✓ | |
| # of Containers | 1 | 1 | 3 | 4 | 4 |
| Container Information | | | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS |
|---|---|---|---|---|---|
| MW095-W-180913 | | | 1 | 1 | 1 |
| MW030-W-180913 | | | 1 | 1 | 1 |
| MW031-W-180913 | | | 1 | 1 | 1 |
| MW060-W-180913 | | | 1 | 1 | 1 |
| MW059-W-180913 | | | 1 | 1 | 1 |
| MW069-W-180913 | | | 1 | 1 | 1 |
| MW023-W-180913 | | | 1 | 1 | 1 |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**REMARKS**

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco
☐ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard TAT
Shipping Tracking #:
Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact
Sample Receipt: Received
Condition/Cooler Temp: 3.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry Silvergueil | Printed Name: Winston Neal | Printed Name: Winston Neal | Printed Name: Adrienne Tell |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 9/13/18 1657 | Date/Time: 09/13/18 16:57 | Date/Time: 09/13/18 1900 | Date/Time: 9/13/18 1900 |

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Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.001

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# 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: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00757** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0195** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00939** | 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

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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00882** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00682** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0180** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0120** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00984** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0189** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.102** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00342** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0141** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0149** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00933** | 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 599188

**Send Results to:**

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: Jerry Montgomery
Sampler's Signature:

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | Preservative | Filtered (✓) | # of Containers | Container Information | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | B | | 1 | 1 | | | | | | |
| | | | | | | B | | 1 | 1 | | | | | | |
| | | | | | | C | ✓ | 3 | 3 | | | | | | |
| | | | | | | E | ✓ | 4 | 4 | | | | | | |
| | | | | | | E | | 4 | 4 | | | | | | |
| MW07A-W-180914 | 9/14/18 | 0946 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW011A-W-180914 | 9/14/18 | 1014 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW002A-W-180914 | 9/14/18 | 1034 | | X | W | | | | | | | 1 | 1 | 1 | |
| DUP-1-W-180914 | 9/14/18 | — | | X | W | | | | | | | 1 | 1 | 1 | |
| MW01EA-W-180914 | 9/14/18 | 1113 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW047-W-180914 | 9/14/18 | 0937 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW008M-W-180914 | 9/14/18 | 0957 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW095A-W-180914 | 9/14/18 | 0926 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW004A-W-180914 | 9/14/18 | 0917 | | X | W | | | | | | | 1 | 1 | 1 | |
| DUP2-W-180914 | 9/14/18 | — | | X | W | | | | | | | 1 | 1 | 1 | |
| EW023-W-180914 | 9/14/18 | 0850 | | X | W | | | | | | | 1 | 1 | 1 | |
| MW035A-W-180914 | 9/14/18 | 0904 | | X | W | | | | | | | 1 | 1 | 1 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

Temp. 5.3 R8 0.0

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: Xenco | Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact | Printed Name: Jerry Montgomery | Printed Name: Shawnee Gomez | Printed Name: | Printed Name: |
| ☒ Cooler packed with ice (✓) | | Signature: | Signature: Shawnee Gomez | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Sample Receipt: | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: 09/14/18 1514 | Date/Time: 9.14.18 15:14 | Date/Time: | Date/Time: |

20730828 CofC AR Form 08.27.2015

**Distribution:** WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.002

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# 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: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0195** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00914** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0120** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00312** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0109** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0158** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0102** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00859** | 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 |

ARCADIS Design & Consultancy for natural and built assets

# Chevron North Eunice

# DATA REVIEW

NORTH EUNICE, NEW MEXICO

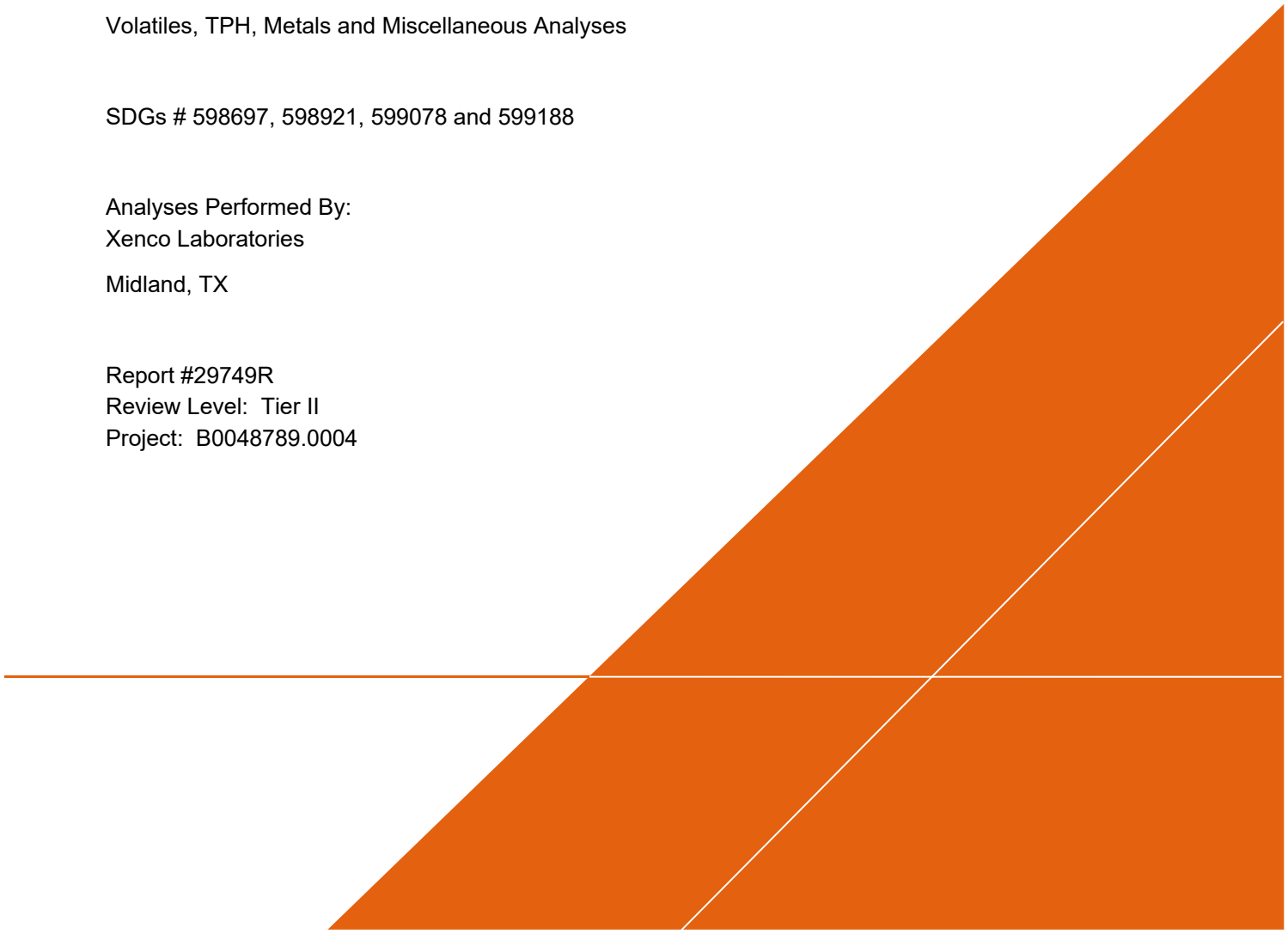
Volatiles, TPH, Metals and Miscellaneous Analyses

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 | MW054SA-W-180912 | | | | X | X |
| | DUP05-W-180912 | 598921-014 | Water | 09-12-2018 | MW079SA-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)<br>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

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 |

| 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.

### 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.

### 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 |

| 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.

### 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 |

| 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

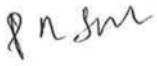
| General Chemistry: EPA 300.0, SM 2540C and SW 7196A | Reported | | Performance Acceptable | | Not Required |
|---|---|---|---|---|---|
| | No | Yes | No | Yes | |
| Miscellaneous Instrumentation | | | | | |
| **Tier II Validation** | | | | | |
| Holding times | | X | | X | |
| Reporting limits (units) | | 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

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 598697

**Send Results to:**

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: Jerry Shongwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | |
| # of Containers | 21 | 14 | 14 | 14 | 14 | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW001-W-180911 | 09/11/18 | 1150 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW046A-W-180911 | 09/11/18 | 1220 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW045-W-180911 | 09/11/18 | 1226 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW037-W-180911 | 09/11/18 | 1248 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW043-W-180911 | 09/11/18 | 1346 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| TW019-W-180911 | 09/11/18 | 1312 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW100-W-180911 DUP | 09/11/18 | 1347 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW076SA-W-180911 DUP | | 1402 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW075SA-W-180911 | | 1412 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW034SA-W-180911 | | 1423 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW035SA-W-180911 | | 1432 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW086SA-W-180911 DUP | | 1447 | | X | W | — | — | 1 | 1 | 1 | | | |
| DUP03-W-180911 | 09/11/18 | — | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| DUP07-W-180911 | 09/11/18 | — | | X | W | — | — | 1 | 1 | 1 | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard TAT
Shipping Tracking #:
Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt: Condition/Cooler Temp: 0.3/0.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry S. Longwell | Printed Name: Winston Wood | Printed Name: Winston Wood | Printed Name: Julian Martinez |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 09/11/18 1632 | Date/Time: 09/11/18 16:59 | Date/Time: 09/11/18 | Date/Time: 9-11-18 19:00 |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.001

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# 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: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order # 698921

**Send Results to:**

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: Jerry Silongwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | | |
|---|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | | |
| # of Containers | | | 19 | 19 | 19 | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW071SA-W-180912 | 9/12/18 | 0911 | | X | W | | | 1 | 1 | 1 | | | |
| MW074SA-W-180912 | 9/12/18 | 0926 | | X | W | | | 1 | 1 | 1 | | | |
| MW056SA-W-180912 | 9/12/18 | 0940 | | X | W | | | 1 | 1 | 1 | | | |
| MW055SA-W-180912 | 9/12/18 | 0954 | | X | W | | | 1 | 1 | 1 | | | |
| MW066SA-W-180912 | 9/12/18 | 1005 | | X | W | | | 1 | 1 | 1 | | | |
| MW073SA-W-180912 | 9/12/18 | 1016 | | X | W | | | 1 | 1 | 1 | | | |
| MW072SA-W-180912 | 9/12/18 | 1135 | | X | W | | | 1 | 1 | 1 | | | |
| MW021A-W-180912 | 9/12/18 | 1149 | | X | W | | | 1 | 1 | 1 | | | |
| MW050SA-W-180912 | 9/12/18 | 1159 | | X | W | | | 1 | 1 | 1 | | | |
| MW051SA-W-180912 | 9/12/18 | 1211 | | X | W | | | 1 | 1 | 1 | | | |
| MW078SA-W-180912 | 9/12/18 | 1225 | | X | W | | | 1 | 1 | 1 | | | |
| MW054SA-N-180912 | 9/12/18 | 1242 | | X | W | | | 1 | 1 | 1 | | | |
| DUP04-W-180912 | 9/12/18 | | | X | W | | | 1 | 1 | 1 | | | |
| DUP05-W-180912 | 9/12/18 | — | | X | W | | | 1 | 1 | 1 | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**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: Jerry Silongwell | Printed Name: Winston Nod | Printed Name: Winston Nod | Printed Name: Katie Lane |
| ☑ Cooler packed with ice (✓) | | Signature: | Signature: | Signature: | Signature: |
| Special Turnaround Requirements: Standard TAT | Sample Receipt: R80.0 | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Shipping Tracking #: | Condition/Cooler Temp: 3.0 | Date/Time: 09/12/18 1708 | Date/Time: 09/12/18 17:08 | Date/Time: 09/12/18 19:00 | Date/Time: 9/12/18 19:00 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #: 598921

**Send Results to:**

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: Jerry Skonycznyl
Sampler's Signature:

| Preservative | B | B | C | E | E | | | |
|---|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | | |
| # of Containers | | | 3 | 4 | 4 | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: _____

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW057SA-W-180912 0912 | 9/12/18 | 1809 | | X | W | | | 1 | 1 | 1 | |
| MW048SA-W-180912 | 9/12/18 | 1320 | | X | W | | | 1 | 1 | 1 | |
| MW049SA-W-180912 | 9/12/18 | 1332 | | X | W | | | 1 | 1 | 1 | |
| MW041A-W-180912 | 9/12/18 | 1347 | | X | W | | | 1 | 1 | 1 | |
| MW062A-W-180912 | 9/12/18 | 1803 | | X | W | | | 1 | 1 | 1 | |
| MW043A-W-180912 | 9/12/18 | 1824 | | X | W | | | 1 | 1 | 1 | |
| MW074A-W-180912 | 9/12/18 | 1843 | | X | W | | | 1 | 1 | 1 | |
| MW070-W-180912 | 9/12/18 | 1502 | | X | W | | | 1 | 1 | 1 | |
| DUP02-W-180912 | 9/12/18 | — | | X | W | | | 1 | 1 | 1 | |

**Special Instructions/Comments:** MW057SA-W-180912 9/12/18 11:35

☐ 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: Jerry S. Lonzarich | Printed Name: Winston Nod | Printed Name: Winston Nod | Printed Name: |
| ☑ Cooler packed with ice (✓) | | Signature: | Signature: | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Sample Receipt: R80.03.0 | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: 3.0 | Date/Time: 09/12/18 1708 | Date/Time: 09/12/18 17:08 | Date/Time: 09/12/18 19:00 | Date/Time: |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:33:14 PM

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# 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0112** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0179** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00822** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0116** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00709** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0107** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0108** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00707** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0131** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0116** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0119** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0103** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0240** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0233** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0125** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0145** | 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order # 590178

**Send Results to:**

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: Gary S. Hongwell

Sampler's Signature:

| Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | |
| # of Containers | | | | | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil; SE - Sediment; NL - NAPL/Oil
W - Water; SL - Sludge; SW - Sample Wipe
T - Tissue; A - Air; Other: _____

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW088M-W-180913 | 9/13/18 | 1447 | | X | W | | | 1 | 1 | 1 | |
| MW013-W-180913 | 9/13/18 | 1434 | | X | W | | | 1 | 1 | 1 | |
| MW044DA-W-180913 | 9/13/18 | 1429 | | X | W | | | 1 | 1 | 1 | |
| MW040-W-180913 | 9/13/18 | 1421 | | X | W | | | 1 | 1 | 1 | |
| MW019A-W-180913 | 9/13/18 | 1409 | | X | W | | | 1 | 1 | 1 | |
| MW018-W-180913 | 9/13/18 | 1346 | | X | W | | | 1 | 1 | 1 | |
| MW020A-W-180913 | 9/13/18 | 1400 | | X | W | | | 1 | 1 | 1 | |
| MW099-W-180913 | 9/13/18 | 1321 | | X | W | | | 1 | 1 | 1 | |
| MW045A-W-180913 | 9/13/18 | 1289 | | X | W | | | 1 | 1 | 1 | |
| MW026-W-180913 | 9/13/18 | 1239 | | X | W | | | 1 | 1 | 1 | |
| MW027-W-180913 | 9/13/18 | 1229 | | X | W | | | 1 | 1 | 1 | |
| MW032-W-180913 | 9/13/18 | 1213 | | X | W | | | 1 | 1 | 1 | |
| MW068-W-180913 | 9/13/18 | 1144 | | X | W | | | 2 | 1 | 1 | |
| MW061-W-180913 | 9/13/18 | 1132 | | X | W | | | 1 | 1 | 1 | |

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco

☐ Cooler packed with ice (✓)

Specify Turnaround Requirements: Standard TAT

Shipping Tracking #:

Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact

Sample Receipt: 190.03.0

Condition/Cooler Temp: 3.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Gary Shongwell | Printed Name: Winston Abel | Printed Name: Winston Abel | Printed Name: Brianna Teel |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 9/14/18 1657 | Date/Time: 09/13/18 16:57 | Date/Time: 09/13/18 1900 | Date/Time: 9/13/18 1900 |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.001

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #: 599078

**Send Results to:**

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: Jerry Silvergueel
Sampler's Signature:

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix |
|---|---|---|---|---|---|
| MW095-W-180913 | 9/13/18 | 1117 | | X | W |
| MW030-W-180913 | 9/13/18 | 0958 | | X | W |
| MW031-W-180913 | 9/13/18 | 1030 | | X | W |
| MW060-W-180913 | 9/13/18 | 1003 | | X | W |
| MW059-W-180913 | 9/13/18 | 1010 | | X | W |
| MW069-W-180913 | 9/13/18 | 1041 | | X | W |
| MW023-W-180913 | 9/13/18 | 1020 | | X | W |

| | B | B | C | E | E |
|---|---|---|---|---|---|
| Preservative | | | | | |
| Filtered (✓) | | | ✓ | ✓ | |
| # of Containers | 1 | 1 | 3 | 4 | 4 |
| Container Information | | | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS |
|---|---|---|---|---|---|
| MW095-W-180913 | | | 1 | 1 | 1 |
| MW030-W-180913 | | | 1 | 1 | 1 |
| MW031-W-180913 | | | 1 | 1 | 1 |
| MW060-W-180913 | | | 1 | 1 | 1 |
| MW059-W-180913 | | | 1 | 1 | 1 |
| MW069-W-180913 | | | 1 | 1 | 1 |
| MW023-W-180913 | | | 1 | 1 | 1 |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**REMARKS**

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco
☐ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard TAT
Shipping Tracking #:

Cooler Custody Seal (✓)
☑ Intact ☐ Not Intact
Sample Receipt: R0003.0
Condition/Cooler Temp: 3.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry Silvergueel | Printed Name: Winston Neal | Printed Name: Winston Neal | Printed Name: Brittney Teel |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 9/13/18 1657 | Date/Time: 09/13/18 16:57 | Date/Time: 09/13/18 1900 | Date/Time: 9/13/18 1900 |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.001

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# 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: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00757** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0195** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00939** | 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

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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00882** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00682** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0180** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0120** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00984** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0189** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.102** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00342** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662476

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0141** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0149** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00933** | 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 599188

**Send Results to:**

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: Jenny Montgomery
Sampler's Signature:

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW07A-W-180914 | 9/14/18 | 0946 | | X | W | | | 1 | 1 | 1 | |
| MW011A-W-180914 | 9/14/18 | 1014 | | X | W | | | 1 | 1 | 1 | |
| MW002A-W-180914 | 9/14/18 | 1034 | | X | W | | | 1 | 1 | 1 | |
| DUP-1-W-180914 | 9/14/18 | — | | X | W | | | 1 | 1 | 1 | |
| MW01EA-W-180914 | 9/14/18 | 1113 | | X | W | | | 1 | 1 | 1 | |
| MW047-W-180914 | 9/14/18 | 0937 | | X | W | | | 1 | 1 | 1 | |
| MW008M-W-180914 | 9/14/18 | 0957 | | X | W | | | 1 | 1 | 1 | |
| MW095A-W-180914 | 9/14/18 | 0926 | | X | W | | | 1 | 1 | 1 | |
| MW004A-W-180914 | 9/14/18 | 0917 | | X | W | | | 1 | 1 | 1 | |
| DUP2-W-180914 | 9/14/18 | — | | X | W | | | 1 | 1 | 1 | |
| EW023-W-180914 | 9/14/18 | 0850 | | X | W | | | 1 | 1 | 1 | |
| MW035A-W-180914 | 9/14/18 | 0904 | | X | W | | | 1 | 1 | 1 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Preservative | B | B | C | E | E |
|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | |
| # of Containers | | | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

Temp. 5.3 R8 0.0

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: Xenco | Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact | Printed Name: Jenny Montgomery | Printed Name: Shawnee Gomez | Printed Name: | Printed Name: |
| ☒ Cooler packed with ice (✓) | | Signature: | Signature: Shawnee Gomez | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Sample Receipt: | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: 09/14/18 1514 | Date/Time: 9.14.18 15:14 | Date/Time: | Date/Time: |

20730828 CofC AR Form 08.27.2015

**Distribution:** WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.002

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# 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: T104704215-18-28 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0195** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00914** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0120** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00312** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0109** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0158** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0102** | 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

Subcontractor: SUB: T104704215-18-28 Prep seq: 7662477

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00859** | 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)

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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,

**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* | *Report Date:* | *19-SEP-18* |
| *Work Order Number:* | *598697* | *Date Received:* | *11-SEP-18* |

*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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00508** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0101** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0152** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00524** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00906** | 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
Work Order #: **598697**
Date Received: 09/11/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **598697**
Date Received: 09/11/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **598697**
Date Received: 09/11/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **598697**
Date Received: 09/11/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **598697**
Date Received: 09/11/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# CHRONOLOGY OF HOLDING TIMES

Analytical Method : Chromium, Hexavalent by SW 7196A
Work Order #: **598697**
Date Received: 09/11/18

Client : ARCADIS
Project ID: B0048789.0004

| 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: | BTEX by EPA 8021B | Batch #: | 3062942 |
| 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 |
| | 598532-001 S | MS |
| | 598532-001 SD | MSD |
| | 7662127-1-BKS | BKS |
| | 7662127-1-BLK | BLK |
| | 7662127-1-BSD | BSD |

# 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 | Lab Sample Id | QC Types |
|---|---|---|
| DUP03-W-180911 | 598697-013 | SMP |
| DUP07-W-180911 | 598697-014 | SMP |
| MW084SA-W-180911 | 598697-010 | SMP |
| MW085SA-W-180911 | 598697-011 | SMP |
| MW086SA-W-180911 | 598697-012 | SMP |
| | 3062947-1-BKS | BKS |
| | 3062947-1-BLK | BLK |
| | 3062947-1-BSD | BSD |
| | 598697-014 S | MS |
| | 598697-014 SD | 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 | Batch #: | 3063327 |
| 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 |
| | 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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>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**

| BTEX by EPA 8021B<br>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 | 0.0903 | 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**

| Chloride by EPA 300<br>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 | 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<br>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 | 0.0409 | 102 | 0.0400 | 0.0410 | 103 | 0 | 85-115 | 20 | |

**Analyst:** OJS **Date Prepared:** 09/12/2018 **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<br>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 | 0.0409 | 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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**

| TDS by SM2540C<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | <5.00 | 1000 | 985 | 99 | 1000 | 954 | 95 | 3 | 80-120 | 10 | |

**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**

| TPH By SW8015 Mod<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons | <0.986 | 99.8 | 94.7 | 95 | 99.8 | 91.9 | 92 | 3 | 70-135 | 20 | |
| 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 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 | 0.109 | 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 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 | 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 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 | 5.21 | 25.0 | 31.1 | 104 | 25.0 | 31.1 | 104 | 0 | 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: 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<br>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 | 0.208 | 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<br>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 | 0.203 | 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<br>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 | 0.00241 | 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*(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: 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<br>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 | 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*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

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

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.

# Sample Duplicate Recovery



## 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

| TDS by SM2540C<br>Analyte | SAMPLE / SAMPLE DUPLICATE RECOVERY<br>Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
|---|---|---|---|---|---|
| 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

| TDS by SM2540C<br>Analyte | SAMPLE / SAMPLE DUPLICATE RECOVERY<br>Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
|---|---|---|---|---|---|
| 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:

[X] R1 Field chain-of-custody documentation;

[X] R2 Sample identification cross-reference;

[X] 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).

[X] R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

[X] R5 Test reports/summary forms for blank samples;

[X] 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.

[X] 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

[X] R8 Laboratory anaytical 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.

[X] R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

[X] R10 Other problems or anomalies.

[X] 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 offical 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** | | **Project Manager** | **19-SEP-18** |
|---|---|---|---|
| Name (Printed) | Signature | Official Title (printed) | Date |

A1

## 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 | | | | |

1. 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.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3. NA = Not applicable;
4. NR = Not reviewed;
5. 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<br>Batch 3062942,<br>Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.<br>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).

A4

# 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 598697

**Send Results to:**

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: Jerry S. Longwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | | |
|---|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | | |
| # of Containers | 21 | 14 | 14 | 14 | 14 | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW001-W-180911 | 09/11/18 | 1150 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW046A-W-180911 | 09/11/18 | 1220 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW045-W-180911 | 09/11/18 | 1226 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW037-W-180911 | 09/11/18 | 1248 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW043-W-180911 | 09/11/18 | 1346 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| TW019-W-180911 | 09/11/18 | 1317 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW100-W-180911 | 09/11/18 | 1347 | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| MW076SA-W-180911 | | 1402 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW075SA-W-180911 | | 1412 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW034SA-W-180911 | | 1423 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW085SA-W-180911 | | 1432 | | X | W | — | — | 1 | 1 | 1 | | | |
| MW086SA-W-180911 | | 1447 | | X | W | — | — | 1 | 1 | 1 | | | |
| DUP03-W-180911 | 09/11/18 | — | | X | W | 3 | 2 | 1 | 1 | 1 | | | |
| DUP07-W-180911 | 09/11/18 | — | | X | W | — | — | 1 | 1 | 1 | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard TAT
Shipping Tracking #:
Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt: Condition/Cooler Temp: 0.3/0.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry S. Longwell | Printed Name: Winston Wood | Printed Name: Winston Wood | Printed Name: Julian Martinez |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 09/11/18 1632 | Date/Time: 09/11/18 16:59 | Date/Time: 09/11/18 | Date/Time: 9-11-18 19:00 |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results; YELLOW – Lab copy; PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.000

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# Inter-Office Shipment





**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

Date Relinquished: 09/12/2018

Received By: Maria Paula Guerra

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:** mPaula Guerra Date: 09/13/2018

Maria Paula Guerra

# 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

Brianna Teel

**Checklist reviewed by:** Kelsey Brooks — Date: 09/13/2018

Kelsey Brooks

# 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)

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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,

**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* | *Report Date:* | *19-SEP-18* |
| *Work Order Number:* | *598921* | *Date Received:* | *12-SEP-18* |

*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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00951** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662348

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0152** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0112** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0106** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00822** | 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

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 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0107** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0108** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.00707** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0103** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0240** | 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

Subcontractor: SUB: TX104704215-18-27 Prep seq: 7662384

| Parameter | CAS Number | Result | MQL | SDL | Units | Analysis Date | Flag | Dil Factor |
|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 7440-38-2 | **0.0233** | 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
Work Order #: **598921**
Date Received: 09/12/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **598921**
Date Received: 09/12/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# 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 | Lab Sample Id | QC Types |
|---|---|---|
| Dup02-W-180912 | 598921-023 | SMP |
| MW024A-W-180912 | 598921-021 | SMP |
| MW057SA-W-180912 | 598921-024 | SMP |
| MW070A-W-180912 | 598921-022 | SMP |
| | 3063022-1-BKS | BKS |
| | 3063022-1-BLK | BLK |
| | 3063022-1-BSD | BSD |
| | 598921-022 S | MS |
| | 598921-022 SD | 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 | Batch #: | 3063648 |
| 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 |
| 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 | Batch #: | 3063675 |
| 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 |
| MW057SA-W-180912 | 598921-024 | SMP |
| MW070A-W-180912 | 598921-022 | SMP |
| | 598921-022 S | MS |
| | 598921-022 SD | MSD |
| | 598921-022 SDL | SDL |
| | 7662476-1-BKS | BKS |
| | 7662476-1-BLK | BLK |
| | 7662476-1-BSD | 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**

| Chloride by EPA 300<br>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**

| Chloride by EPA 300<br>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**

| Chromium, Hexavalent by SW 7196A<br>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<br>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 | |

**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<br>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 | |

**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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | |

**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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 6.33 | 25.0 | 33.5 | 109 | 25.0 | 33.7 | 109 | 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: 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**

| Chloride by EPA 300<br>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**

| Chromium, Hexavalent by SW 7196A<br>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**

| Chromium, Hexavalent by SW 7196A<br>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*(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: 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<br>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 | 0.196 | 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<br>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 | 0.00241 | 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<br>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 | 0.000338 | 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*(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: 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<br>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 | 0.0145 | 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*(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.

# Sample Duplicate Recovery



## 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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:

[X] R1 Field chain-of-custody documentation;

[X] R2 Sample identification cross-reference;

[X] 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).

[X] R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

[X] R5 Test reports/summary forms for blank samples;

[X] 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.

[X] 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

[X] R8 Laboratory anaytical 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.

[X] R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

[X] R10 Other problems or anomalies.

[X] 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 offical 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** | | **Project Manager** | **19-SEP-18** |
|---|---|---|---|
| Name (Printed) | Signature | Official Title (printed) | Date |

A1

## 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 (** | | | | | |
| | | 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 | | | | |

1. 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.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3. NA = Not applicable;
4. NR = Not reviewed;
5. 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).

A4

# DCS Summary 598921

## 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order # 698921

**Send Results to:**

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: Jerry Silongwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | | |
|---|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | | |
| # of Containers | | | 19 | 19 | 19 | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | | |

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW071SA-W-180912 | 9/12/18 | 0911 | | X | W | | | 1 | 1 | 1 | | | |
| MW074SA-W-180912 | 9/12/18 | 0926 | | X | W | | | 1 | 1 | 1 | | | |
| MW056SA-W-180912 | 9/12/18 | 0940 | | X | W | | | 1 | 1 | 1 | | | |
| MW055SA-W-180912 | 9/12/18 | 0954 | | X | W | | | 1 | 1 | 1 | | | |
| MW066SA-W-180912 | 9/12/18 | 1005 | | X | W | | | 1 | 1 | 1 | | | |
| MW073SA-W-180912 | 9/12/18 | 1016 | | X | W | | | 1 | 1 | 1 | | | |
| MW072SA-W-180912 | 9/12/18 | 1135 | | X | W | | | 1 | 1 | 1 | | | |
| MW021A-W-180912 | 9/12/18 | 1149 | | X | W | | | 1 | 1 | 1 | | | |
| MW050SA-W-180912 | 9/12/18 | 1159 | | X | W | | | 1 | 1 | 1 | | | |
| MW051SA-W-180912 | 9/12/18 | 1211 | | X | W | | | 1 | 1 | 1 | | | |
| MW028SA-W-180912 | 9/12/18 | 1225 | | X | W | | | 1 | 1 | 1 | | | |
| MW054SA-W-180912 | 9/12/18 | 1242 | | X | W | | | 1 | 1 | 1 | | | |
| DUP04-W-180912 | 9/12/18 | | | X | W | | | 1 | 1 | 1 | | | |
| DUP05-W-180912 | 9/12/18 | — | | X | W | | | 1 | 1 | 1 | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**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: Jerry Silongwell | Printed Name: Winston Nod | Printed Name: Winston Nod | Printed Name: Katie Lane |
| ☑ Cooler packed with ice (✓) | | Signature: | Signature: | Signature: | Signature: |
| Special Turnaround Requirements: Standard TAT | Sample Receipt: R80.030 | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Shipping Tracking #: | Condition/Cooler Temp: 3.0 | Date/Time: 09/12/18 1708 | Date/Time: 09/12/18 17:08 | Date/Time: 09/12/18 19:00 | Date/Time: 9/12/18 19:00 |

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Received by OCD: 3/25/2020 3:43:14 PM

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #: 598921

**Send Results to:**

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: Jerry Slongwell
Sampler's Signature:

| Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | |
| # of Containers | | | 3 | 4 | 4 | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW057SA-W-180912 | 9/12/18 | 1809 | | X | W | | | 1 | 1 | 1 | | | |
| MW048SA-W-180912 | 9/12/18 | 1320 | | X | W | | | 1 | 1 | 1 | | | |
| MW049SA-W-180912 | 9/12/18 | 1332 | | X | W | | | 1 | 1 | 1 | | | |
| MW041A-W-180912 | 9/12/18 | 1347 | | X | W | | | 1 | 1 | 1 | | | |
| MW062A-W-180912 | 9/12/18 | 1803 | | X | W | | | 1 | 1 | 1 | | | |
| MW043A-W-180912 | 9/12/18 | 1824 | | X | W | | | 1 | 1 | 1 | | | |
| MW024A-W-180912 | 9/12/18 | 1843 | | X | W | | | 1 | 1 | 1 | | | |
| MW070-W-180912 | 9/12/18 | 1502 | | X | W | | | 1 | 1 | 1 | | | |
| DUP02-W-180912 | 9/12/18 | — | | X | W | | | 1 | 1 | 1 | | | |

**Special Instructions/Comments:** MW057SA-W-180912 9/12/18 11:35

☐ Special QA/QC Instructions(✓):

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 1 | 1 | | | |

**Laboratory Information and Receipt**

Lab Name: Xenco
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard TAT
Shipping Tracking #:

Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact
Sample Receipt: R80.030
Condition/Cooler Temp: 3.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Jerry S. Longwell | Printed Name: Winston Nod | Printed Name: Winston Nod | Printed Name: |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: |
| Date/Time: 09/12/18 1708 | Date/Time: 09/12/18 17:08 | Date/Time: 09/12/18 19:00 | Date/Time: |

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:33:14 PM

Final 1.000

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# Inter-Office Shipment





**IOS Number** **113951**

Date/Time: 09/13/18 08:02
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.: 773214945614
E-Mail: kelsey.brooks@xenco.com

| Sample Id | Matrix | Client Sample Id | Sample Collection | Method | Method Name | Lab Due | HT Due | PM | Analytes | Sign |
|---|---|---|---|---|---|---|---|---|---|---|
| 598921-001 | W | MW071SA-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 | MW074SA-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 | MW056SA-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 | MW055SA-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 | MW066SA-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 | MW073SA-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 | MW072SA-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 | MW021SA-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 | MW050SA-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 | MW051SA-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 | MW079SA-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 | MW054SA-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 | MW052SA-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 | MW049SA-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 | MW048SA-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 | MW057SA-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





**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

Inter Office Shipment or Sample Comments:

Relinquished By: Katie Lowe

Date Relinquished: 09/13/2018

Received By: Rene Vandenberghe

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:** R. C. Vandenberghe Date: 09/14/2018

Rene Vandenberghe

# 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)

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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,

**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* | *Report Date:* | *20-SEP-18* |
| *Work Order Number:* | *599078* | *Date Received:* | *13-SEP-18* |

*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
Work Order #: **599078**
Date Received: 09/13/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **599078**
Date Received: 09/13/18

Client : ARCADIS
Project ID: B0048789.0004

| 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
Work Order #: **599078**
Date Received: 09/13/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

Version: 1.014

# 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 | Lab Sample Id | QC Types |
|---|---|---|
| MW023-W-180913 | 599078-021 | 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 |
| 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 |
| | 3063195-1-BKS | BKS |
| | 3063195-1-BLK | BLK |
| | 3063195-1-BSD | BSD |
| | 599078-016 S | MS |
| | 599078-016 SD | MSD |

Version: 1.014

# 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 | Lab Sample Id | QC Types |
|---|---|---|
| MW069-W-180913 | 599078-020 | SMP |
| | 3063196-1-BKS | BKS |
| | 3063196-1-BLK | BLK |
| | 3063196-1-BSD | BSD |
| | 599078-020 S | MS |
| | 599078-020 SD | MSD |

Version: 1.014

# 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 |

Version: 1.014

# Analytical Log

| | | | |
|---|---|---|---|
| Analytical Method: | Dissolved Metals by SW6020A | Batch #: | 3063644 |
| 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 |
| MW069-W-180913 | 599078-020 | SMP |
| | 599078-020 S | MS |
| | 599078-020 SD | MSD |
| | 599078-020 SDL | SDL |
| | 7662477-1-BKS | BKS |
| | 7662477-1-BLK | BLK |
| | 7662477-1-BSD | BSD |

Version: 1.014

# Analytical Log

| | | | |
|---|---|---|---|
| Analytical Method: | Dissolved Metals by SW6020A | Batch #: | 3063648 |
| Project Name: | Chevron N. Eunice | Project ID: | B0048789.0004 |
| Client Name: | ARCADIS | WO Number: | 599078 |

| Client Sample Id | Lab Sample Id | QC Types |
|---|---|---|
| MW013-W-180913 | 599078-002 | SMP |
| MW088M-W-180913 | 599078-001 | SMP |
| | 598788-014 S | MS |
| | 598788-014 SD | MSD |
| | 7662384-1-BKS | BKS |
| | 7662384-1-BLK | BLK |
| | 7662384-1-BSD | BSD |

Version: 1.014

# Analytical Log

| | | | |
|---|---|---|---|
| Analytical Method: | Dissolved Metals by SW6020A | Batch #: | 3063675 |
| 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 |
| 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 |

Version: 1.014

# 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 |

Version: 1.014

# 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 |

Version: 1.014

# 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 |

Version: 1.014

# 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**

| Chloride by EPA 300<br>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 | 26.1 | 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**

| Chloride by EPA 300<br>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 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**

| Chromium, Hexavalent by SW 7196A<br>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 | |

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

Version: 1.%

# 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<br>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:** 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<br>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:** 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

Version: 1.%

# 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | |

**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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

Version: 1.%

# 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | <5.00 | 1000 | 973 | 97 | 1000 | 988 | 99 | 2 | 80-120 | 10 | |

**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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

Version: 1.%

# 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 38.6 | 25.0 | 64.5 | 104 | 25.0 | 64.5 | 104 | 0 | 90-110 | 20 | |

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

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

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<br>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:** 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<br>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 | 0.202 | 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<br>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 | 0.186 | 93 | 0.200 | 0.192 | 96 | 3 | 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: 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<br>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 | |

**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<br>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 | 0.0149 | 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<br>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 | 0.000338 | 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*(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: 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<br>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 | 0.0145 | 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*(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.

# Sample Duplicate Recovery



## 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

Version: 1.%

# 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:

[X] R1 Field chain-of-custody documentation;

[X] R2 Sample identification cross-reference;

[X] 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).

[X] R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

[X] R5 Test reports/summary forms for blank samples;

[X] 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.

[X] 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

[X] R8 Laboratory anaytical 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.

[X] R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

[X] R10 Other problems or anomalies.

[X] 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 offical 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** | | **Project Manager** | **20-SEP-18** |
|---|---|---|---|
| Name (Printed) | Signature | Official Title (printed) | Date |

A1

## 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 (** | | | | | |
| | | 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 | | | | |

1. 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.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3. NA = Not applicable;
4. NR = Not reviewed;
5. 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).

A4

# DCS Summary 599078

## 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order # 590178

**Send Results to:**

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: Gary S. Hongsuwat

Sampler's Signature:

| Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | | | |
| # of Containers | | | | | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW088M-W-180913 | 9/13/18 | 1447 | | X | W | | | 1 | 1 | 1 | |
| MW013-W-180913 | 9/13/18 | 1434 | | X | W | | | 1 | 1 | 1 | |
| MW04DA-W-180913 | 9/13/18 | 1429 | | X | W | | | 1 | 1 | 1 | |
| MW010-W-180913 | 9/13/18 | 1421 | | X | W | | | 1 | 1 | 1 | |
| MW019A-W-180913 | 9/13/18 | 1409 | | X | W | | | 1 | 1 | 1 | |
| MW018-W-180913 | 9/13/18 | 1346 | | X | W | | | 1 | 1 | 1 | |
| MW020A-W-180913 | 9/13/18 | 1400 | | X | W | | | 1 | 1 | 1 | |
| MW099-W-180913 | 9/13/18 | 1321 | | X | W | | | 1 | 1 | 1 | |
| MW015A-W-180913 | 9/13/18 | 1289 | | X | W | | | 1 | 1 | 1 | |
| MW026-W-180913 | 9/13/18 | 1239 | | X | W | | | 1 | 1 | 1 | |
| MW027-W-180913 | 9/13/18 | 1229 | | X | W | | | 1 | 1 | 1 | |
| MW032-W-180913 | 9/13/18 | 1213 | | X | W | | | 1 | 1 | 1 | |
| MW068-W-180913 | 9/13/18 | 1144 | | X | W | | | 2 | 1 | 1 | |
| MW061-W-180913 | 9/13/18 | 1132 | | X | W | | | 1 | 1 | 1 | |

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

**Laboratory Information and Receipt**

Lab Name: Xenco

☐ Cooler packed with ice (✓)

Specify Turnaround Requirements: Standard TAT

Shipping Tracking #:

Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact

Sample Receipt: Condition/Cooler Temp: 1.0.03.0

| Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|
| Printed Name: Gary Shongsuwat | Printed Name: Winston Abbey | Printed Name: Winston Abbey | Printed Name: Brianna Teel |
| Signature: | Signature: | Signature: | Signature: |
| Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Date/Time: 9/13/18 1657 | Date/Time: 09/13/18 16:57 | Date/Time: 09/13/18 1900 | Date/Time: 9/13/18 1900 |

20730828 CofC AR Form 08.27.2015

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #: 599078

**Send Results to:**

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: Jerry Silvergueel
Sampler's Signature:

| Preservative | B | B | C | E | E |
|---|---|---|---|---|---|
| Filtered (✓) | | | ✓ | ✓ | |
| # of Containers | | | | | |
| Container Information | 1 | 1 | 3 | 4 | 4 |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

**PARAMETER ANALYSIS & METHOD**

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW095-W-180913 | 9/13/18 | 1117 | | X | W | | | 1 | 1 | 1 | |
| MW030-W-180913 | 9/13/18 | 0958 | | X | W | | | 1 | 1 | 1 | |
| MW031-W-180913 | 9/13/18 | 1030 | | X | W | | | 1 | 1 | 1 | |
| MW060-W-180913 | 9/13/18 | 1003 | | X | W | | | 1 | 1 | 1 | |
| MW059-W-180913 | 9/13/18 | 1010 | | X | W | | | 1 | 1 | 1 | |
| MW069-W-180913 | 9/13/18 | 1041 | | X | W | | | 1 | 1 | 1 | |
| MW023-W-180913 | 9/13/18 | 1020 | | X | W | | | 1 | 1 | 1 | |

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

| Laboratory Information and Receipt | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|
| Lab Name: Xenco | Printed Name: Jerry Silvergueel | Printed Name: Winston Noel | Printed Name: Winston Noel | Printed Name: Courtney Teel |
| ☐ Cooler packed with ice (✓) | Signature: | Signature: | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: Xenco | Firm: Xenco |
| Shipping Tracking #: | Date/Time: 9/13/18 1657 | Date/Time: 09/13/18 16:57 | Date/Time: 09/13/18 1900 | Date/Time: 9/13/18 1900 |
| Cooler Custody Seal (✓): ☑ Intact ☐ Not Intact | | | | |
| Sample Receipt: Condition/Cooler Temp: 3.0 | | | | |

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# Inter-Office Shipment





**IOS Number** **114005**

Date/Time: 09/14/18 08:29
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.: 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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





**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

Inter Office Shipment or Sample Comments:

Relinquished By: Brianna Teel
Brianna Teel

Date Relinquished: 09/14/2018

Received By: Rene Vandenberghe

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:** R. C. Vandenberghe Date: 09/15/2018

Rene Vandenberghe

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**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

Brianna Teel

**Checklist reviewed by:** Kelsey Brooks Date: 09/14/2018

Kelsey Brooks

# 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)

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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,

**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* | *Report Date:* | *21-SEP-18* |
| *Work Order Number:* | *599188* | *Date Received:* | *14-SEP-18* |

*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

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

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
Work Order #: **599188**
Date Received: 09/14/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# CHRONOLOGY OF HOLDING TIMES

Analytical Method : TDS by SM2540C
Work Order #: **599188**
Date Received: 09/14/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# CHRONOLOGY OF HOLDING TIMES

Analytical Method : Dissolved Metals by SW6020A
Work Order #: **599188**
Date Received: 09/14/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# 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 | Lab Sample Id | QC Types |
|---|---|---|
| DUP1-W-180914 | 599188-004 | SMP |
| MW002A-W-180914 | 599188-003 | SMP |
| MW007A-W-180914 | 599188-001 | SMP |
| MW008M-W-180914 | 599188-007 | SMP |
| MW011A-W-180914 | 599188-002 | 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: | 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**

| Chloride by EPA 300<br>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 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**

| Chromium, Hexavalent by SW 7196A<br>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**

| Chromium, Hexavalent by SW 7196A<br>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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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**

| Chloride by EPA 300<br>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**

| Chloride by EPA 300<br>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**

| Chromium, Hexavalent by SW 7196A<br>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*(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: 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<br>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 | 0.232 | 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<br>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 | 0.0149 | 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*(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.

# Sample Duplicate Recovery



## 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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:

[X] R1 Field chain-of-custody documentation;

[X] R2 Sample identification cross-reference;

[X] 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).

[X] R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

[X] R5 Test reports/summary forms for blank samples;

[X] 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.

[X] 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

[X] R8 Laboratory anaytical 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.

[X] R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

[X] R10 Other problems or anomalies.

[X] 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 offical 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** | | **Project Manager** | **21-SEP-18** |
|---|---|---|---|
| Name (Printed) | Signature | Official Title (printed) | Date |

A1

## 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 | | | | |

1. 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.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3. NA = Not applicable;
4. NR = Not reviewed;
5. 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).

A4

# DCS Summary 599188

## 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # 599188

**Send Results to:**

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: Jerry Montgomery
Sampler's Signature:

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | Preservative | B | B | C | E | E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Filtered (✓) | | | ✓ | ✓ | | | |
| | | | | | | # of Containers | | | | | | | |
| | | | | | | Container Information | 1 | 1 | 3 | 4 | 4 | | |
| | | | | | | | BTEX 8021B | TPH GRO & DRO 8015B | Dissolved As, Mn, Fe, Cr 6010B | Dissolved Hex Chromium 7196 | Chloride & TDS | | |
| MW07A-W-180914 | 9/14/18 | 0946 | | X | W | | | | 1 | 1 | 1 | | |
| MW011A-W-180914 | 9/14/18 | 1014 | | X | W | | | | 1 | 1 | 1 | | |
| MW002A-W-180914 | 9/14/18 | 1034 | | X | W | | | | 1 | 1 | 1 | | |
| DUP-1-W-180914 | 9/14/18 | — | | X | W | | | | 1 | 1 | 1 | | |
| MW01EA-W-180914 | 9/14/18 | 1113 | | X | W | | | | 1 | 1 | 1 | | |
| MW047-W-180914 | 9/14/18 | 0937 | | X | W | | | | 1 | 1 | 1 | | |
| MW008M-W-180914 | 9/14/18 | 0957 | | X | W | | | | 1 | 1 | 1 | | |
| MW095A-W-180914 | 9/14/18 | 0926 | | X | W | | | | 1 | 1 | 1 | | |
| MW004A-W-180914 | 9/14/18 | 0917 | | X | W | | | | 1 | 1 | 1 | | |
| DUP2-W-180914 | 9/14/18 | — | | X | W | | | | 1 | 1 | 1 | | |
| EW023-W-180914 | 9/14/18 | 0850 | | X | W | | | | 1 | 1 | 1 | | |
| MW035A-W-180914 | 9/14/18 | 0904 | | X | W | | | | 1 | 1 | 1 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

**PARAMETER ANALYSIS & METHOD**

**REMARKS**

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

Temp. 5.3 R8 0.0

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: Xenco | Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact | Printed Name: Jerry Montgomery | Printed Name: Shawnee Gomez | Printed Name: | Printed Name: |
| ☒ Cooler packed with ice (✓) | | Signature: | Signature: Shawnee Gomez | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Sample Receipt: | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: 09/14/18 1514 | Date/Time: 9.14.18 15:14 | Date/Time: | Date/Time: |

20730828 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.000

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# Inter-Office Shipment





**IOS Number** **114043**

Date/Time: 09/14/18 15:39
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Gomez
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

| 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

Date Relinquished: 09/14/2018

Received By: Rene Vandenberghe

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:** R. C. Vandenberghe Date: 09/15/2018

Rene Vandenberghe

# 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)

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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,

**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* | *Report Date:* | *26-SEP-18* |
| *Work Order Number:* | *599188* | *Date Received:* | *14-SEP-18* |

*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

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: **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
Work Order #: **599188**
Date Received: 09/14/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# CHRONOLOGY OF HOLDING TIMES

Analytical Method : TDS by SM2540C
Work Order #: **599188**
Date Received: 09/14/18

Client : ARCADIS
Project ID: B0048789.0004

| 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 |

XENCO LABORATORIES

# 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 | Lab Sample Id | QC Types |
|---|---|---|
| DUP01-W-180914 | 599188-004 | SMP |
| MW002A-W-180914 | 599188-003 | SMP |
| MW007A-W-180914 | 599188-001 | SMP |
| MW008M-W-180914 | 599188-007 | SMP |
| MW011A-W-180914 | 599188-002 | 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: | 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 |
|---|---|---|
| DUP06-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 |
|---|---|---|
| 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**

| Chloride by EPA 300<br>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 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**

| Chromium, Hexavalent by SW 7196A<br>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**

| Chromium, Hexavalent by SW 7196A<br>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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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<br>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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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**

| Chloride by EPA 300<br>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**

| Chloride by EPA 300<br>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**

| Chromium, Hexavalent by SW 7196A<br>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*(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: 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<br>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 | 0.232 | 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<br>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 | 0.0149 | 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*(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.

# Sample Duplicate Recovery



## 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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

| TDS by SM2540C | SAMPLE / SAMPLE DUPLICATE RECOVERY | | | | |
|---|---|---|---|---|---|
| Analyte | Parent Sample Result [A] | Sample Duplicate Result [B] | %RPD | RPD Limit | Flag |
| 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:

[X] R1 Field chain-of-custody documentation;

[X] R2 Sample identification cross-reference;

[X] 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).

[X] R4 Surrogate Recovery data including:
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

[X] R5 Test reports/summary forms for blank samples;

[X] 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.

[X] 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

[X] R8 Laboratory anaytical 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.

[X] R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;

[X] R10 Other problems or anomalies.

[X] 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 offical 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** | | **Project Manager** | **26-SEP-18** |
|---|---|---|---|
| Name (Printed) | Signature | Official Title (printed) | Date |

A1

## 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 | | | | |

1. 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.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3. NA = Not applicable;
4. NR = Not reviewed;
5. 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).

A4

# DCS Summary 599188

## 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 |

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ARCADIS

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: 599188

**Send Results to:**

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: Jenny Montgomery
Sampler's Signature:

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix | # of Containers | BTEX 8021B (B) | TPH GRO & DRO 8015B (B) | Dissolved As, Mn, Fe, Cr 6010B (C ✓) | Dissolved Hex Chromium 7196 (E ✓) | Chloride & TDS (E) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW07A-W-180914 | 9/14/18 | 0946 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW011A-W-180914 | 9/14/18 | 1014 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW002A-W-180914 | 9/14/18 | 1034 | | X | W | 1 | | | 1 | 1 | 1 | |
| DUP-1-W-180914 | 9/14/18 | — | | X | W | 1 | | | 1 | 1 | 1 | |
| MW01EA-W-180914 | 9/14/18 | 1113 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW047-W-180914 | 9/14/18 | 0937 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW008M-W-180914 | 9/14/18 | 0957 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW095A-W-180914 | 9/14/18 | 0826 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW004A-W-180914 | 9/14/18 | 0917 | | X | W | 1 | | | 1 | 1 | 1 | |
| DUP2-W-180914 | 9/14/18 | — | | X | W | 1 | | | 1 | 1 | 1 | |
| EW023-W-180914 | 9/14/18 | 0850 | | X | W | 1 | | | 1 | 1 | 1 | |
| MW035A-W-180914 | 9/14/18 | 0904 | | X | W | 1 | | | 1 | 1 | 1 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
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:**
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

**Special Instructions/Comments:**

☐ Special QA/QC Instructions(✓):

Temp. 5.3 R8 0.0

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: Xenco | Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact | Printed Name: Jenny Montgomery | Printed Name: Shawnee Gomez | Printed Name: | Printed Name: |
| ☒ Cooler packed with ice (✓) | | Signature: | Signature: Shawnee Gomez | Signature: | Signature: |
| Specify Turnaround Requirements: Standard TAT | Sample Receipt: | Firm: Arcadis | Firm/Courier: Xenco | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: 09/14/18 1514 | Date/Time: 9.14.18 15:14 | Date/Time: | Date/Time: |

20730828 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Received by OCD: 3/25/2020 3:43:14 PM

Final 1.001

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# Inter-Office Shipment





**IOS Number** **114043**

Date/Time: 09/14/18 15:39
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Shawnee Gomez
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

| 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

Date Relinquished: 09/14/2018

Received By: Rene Vandenberghe

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:** R. C. Vandenberghe Date: 09/15/2018

Rene Vandenberghe

# 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

# APPENDIX E

## Historical Analytical Data (through 2017)

ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| Location ID | Sample Date | Sample Type | Chemical Name / Units / NMWQCC Standard | Dissolved Arsenic mg/l 0.1 | Total Arsenic mg/l 0.1 | Dissolved Chromium mg/l 0.05 | Total Chromium mg/l 0.05 | Dissolved Chromium VI mg/l 0.05 | Total Chromium VI mg/l 0.05 | Dissolved Iron mg/l 1 | Total Iron mg/l 1 | Dissolved Manganese mg/l 0.2 | Total Manganese mg/l 0.2 | Benzene ug/l 5 | Toluene ug/l 1,000 | Ethylbenzene ug/l 700 | Total Xylenes ug/l 620 | DRO mg/l | GRO mg/l | Chloride mg/l 250 | TDS mg/l 1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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** |
| IW001 | 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<br>< 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<br>< 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** | -- |
| | 8/11/2004 | 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** |
| | 7/20/2006 | N | | -- | **0.0287** | -- | **0.02** | -- | < 0.02 U | -- | **208** | **4.55** | **4.55** | < 10 U | < 10 U | < 10 U | < 30 U | < 480 U | **6.2** | **240** | **11,400** |
| | 4/16/2007 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 2 U | -- | **71.9** | **1.32** | **1.32** | < 50 U | < 50 U | < 50 U | **150** | **550** | **4.5** | **689** | -- |
| | 4/17/2008 | N | | -- | < 0.5 U | -- | < 0.375 U | -- | < 2 U | -- | **197** | **5.12** | **5.12** | < 20 U | < 20 U | < 20 U | < 60 U | **230** | **2.8** | **686** | **11,200** |
| | 3/31/2009 | N | | -- | **0.0519** | -- | < 0.015 U | -- | < 2 U | -- | **49.8** | **2.45** | **2.45** | **5.9** | **5.3** | < 5 U | < 15 U | **35** | **0.25** | **738** | **6,510** |
| | 3/11/2010 | N | | -- | < 0.5 U | -- | < 0.500 U | -- | **0.648** | -- | **7.58** | **1.1** | **1.1** | < 1 U | < 1 U | < 1 U | < 1 U | **2.69** | < 0.05 U | **638** | **3,240** |
| | 5/25/2012 | N | | < 0.0500 U | -- | < 0.0500 U | -- | -- | **0.268** | **3.54** | -- | **1.92** | -- | < 1.00 U | **2.79** | < 1.00 U | < 1.00 U | -- | -- | **950** | **5,330** |
| | 5/21/2013 | N | | **0.0582** | -- | **0.0241** | -- | -- | < 0.200 U | **3.59** | -- | **1.78** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **963** | **5,700** |
| | 5/8/2014 | N | | **0.0567** | -- | **0.00854 J** | -- | -- | < 0.0500 U | **3.28** | -- | **1.89** | -- | < 1.00 U | **1.16 J** | < 1.00 U | < 1.00 U | -- | -- | **1,020** | **5,250** |
| | 6/4/2015 | N | | **0.0534** | -- | **0.00893 J** | -- | -- | < 0.200 U | **3.46 J** | -- | **1.92** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,150** | **5,700** |
| | 5/20/2016 | N | | **0.0214** | -- | **0.0136** | -- | < 0.0548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **663** | **6,110** |
| | 5/5/2017 | N | | **0.0179 J** | -- | **0.0108 J** | -- | < 0.01 U | -- | **1.54 J** | -- | **1.84 J** | -- | -- | -- | -- | -- | -- | -- | **1030** | **4,350** |
| | 9/19/2002 | N | | -- | < 0.05 U | **3.17** | -- | **0.32** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **760** | **3,180** |
| | 6/11/2003 | N | | -- | < 0.05 U | **4.02** | **3.92** | **3.28** | -- | < 0.1 U | < 0.1 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | **920** | -- |
| | 6/11/2003 | FD | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **940** | -- |
| | 7/2/2003 | N | | -- | < 0.05 U | < 0.5 U | < 0.5 U | < 0.05 U | -- | **13** | **12** | **8.9** | **8.2** | -- | -- | -- | -- | -- | -- | **2,200** | -- |
| | 7/8/2003 | N | | -- | < 0.05 U | **0.09** | **0.09** | < 0.05 U | -- | **21.9** | **22.7** | **1.88** | **1.97** | -- | -- | -- | -- | -- | -- | **3,200** | -- |
| | 7/15/2003 | N | | -- | < 0.05 U | < 0.05 U | < 0.05 U | < 0.1 U<br>< 1 U | -- | **35.1** | **40.1** | **2.18** | **2.54** | -- | -- | -- | -- | -- | -- | **3,000** | -- |
| | 7/30/2003 | N | | -- | < 0.5 U | < 0.5 U | < 0.5 U | **0.6** | -- | **37** | **42** | **1.2** | **1.4** | -- | -- | -- | -- | -- | -- | **2,200** | -- |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| 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 | < 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 | < 1200 U | < 5000 U | 1,130 | 35,300 |
| | 7/25/2006 | N | -- | 0.205 | -- | 0.0305 | -- | < 2 U | -- | 4.69 | 33.5 | 33.5 | < 10 U | < 10 U | < 10 U | < 200 U | 720 | 3.2 | 1,080 | 10,600 |
| | 4/9/2007 | N | -- | 0.358 | -- | 0.075 | -- | < 2 U | -- | 27.3 | 14.8 | 14.8 | < 50 U | < 50 U | < 50 U | < 15 U | 2.4 | < 2.5 U | 1,130 | -- |
| | 4/3/2008 | N | -- | 0.254 | -- | 0.075 | -- | < 2 U | -- | 26.1 | 15.3 | 15.3 | < 10 U | < 10 U | < 10 U | < 30 U | 3.1 | < 0.5 U | 1,130 | 4,440 |
| | 3/23/2009 | N | -- | 0.188 | -- | 0.0152 | -- | < 0.20 U | -- | 22.5 | 12.5 | 12.5 | < 5 U | < 5 U | < 5 U | < 15 U | 2.1 | < 0.25 U | 1,050 | 4,400 |
| | 3/3/2010 | N | -- | 0.55 | -- | < 0.50 U | -- | < 0.01 U | -- | 9.25 | 15.8 | 15.8 | < 1 U | < 2 U | < 1 U | < 1 U | 0.625 | < 0.05 U | 850 | 2,160 |
| | 5/11/2012 | N | 0.0111 | -- | < 0.0100 U | -- | -- | 0.115 | 3.6 | -- | 5.12 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 995 J | 4,020 |
| | 5/20/2014 | N | 0.0183 J | -- | 0.00673 J | -- | -- | < 0.0500 U | 2.22 | -- | 8.57 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,070 | 3,640 |
| | 5/12/2015 | N | 0.029 | -- | < 0.0100 U | -- | -- | < 0.0500 U | 1.71 | -- | 8.1 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,130 | 3,680 |
| | 5/17/2016 | N | 0.0218 | -- | 0.00855 J | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 916 | 2,680 |
| | 5/8/2017 | N | 0.0137 | -- | 0.00781 | -- | < 0.01 U | -- | 6.3 | -- | 8.02 | -- | -- | -- | -- | -- | -- | -- | 1,090 | 2,600 |
| | 3/22/2018 | Reg | -- | 0.00717 | -- | 0.00409 | -- | 0.00330 J | 3.57 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 999 | 2,200 |
| | 12/18/2003 | N | -- | < 0.05 U | 0.64 | 0.62 | < 0.005 U | -- | < 0.1 U | 0.3 | < 0.05 U | < 0.05 U | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | 680 | 2,450 |
| | 6/9/2004 | N | -- | < 0.01 U | 0.16 | 0.17 | < 0.1 U | -- | 59.3 | 61.2 | 48.2 | 49.8 | -- | -- | -- | -- | -- | -- | 2,080 | -- |
| | 7/8/2004 | N | -- | < 0.01 U | 0.19 | 0.17 | 1.9 | -- | 101 | 103 | 39.1 | 38.8 | -- | -- | -- | -- | -- | -- | 2,900 | -- |
| | 8/18/2004 | N | -- | < 0.01 U | 0.14 | 0.14 | 0.1 | -- | 97.1 | 95.9 | 36.1 | 37.6 | -- | -- | -- | -- | -- | -- | 1,900 | -- |
| | 10/11/2004 | N | -- | < 0.1 U | < 0.5 U | < 0.5 U | < 0.1 U | -- | 74 | 66 | 15.9 | 14.7 | -- | -- | -- | -- | -- | -- | 1,150 | -- |
| | 1/6/2005 | N | -- | < 0.1 U | 0.2 | 0.2 | < 0.1 U | -- | 308 | 303 | 47.3 | 46.7 | -- | -- | -- | -- | -- | -- | 550 | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| 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 | 1,940 |
| | 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 | -- | -- | -- | < 0.1 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 | 0.13 | 0.17 | < 0.1 U | -- | 96.9 | 114 | 37.7 | 50.1 | -- | -- | -- | -- | -- | -- | 2,700 | -- |
| | 7/20/2004 | N | -- | < 0.01 U | 0.15 | 0.17 | < 0.1 U | -- | 105 | 135 | 28.8 | 35.8 | -- | -- | -- | -- | -- | -- | 2,600 | -- |
| | 8/18/2004 | N | -- | 0.04 | 0.12 | 0.11 | < 0.1 U | -- | 95.5 | 93.1 | 19 | 18.5 | -- | -- | -- | -- | -- | -- | 2,100 | -- |
| | 10/13/2004 | N | -- | < 0.1 U | < 0.5 U | < 0.5 U | < 0.005 U | -- | 169 | 202 | 22 | 26.5 | -- | -- | -- | -- | -- | -- | 1,620 | -- |
| | 12/1/2004 | N | -- | < 0.01 U | 0.36 | 0.41 | 0.008 | -- | 272 | 313 | 36.4 | 41.3 | -- | -- | -- | -- | -- | -- | 1,740 | 41,500 |
| | 1/10/2005 | N | -- | < 0.1 U | 0.3 | 0.3 | < 0.1 U | -- | 230 | 240 | 32.4 | 35.3 | -- | -- | -- | -- | -- | -- | 880 | -- |
| | 1/31/2005 | N | -- | < 0.1 U | 0.2 | 0.2 | < 0.05 U | -- | 128 | 168 | 22.4 | 30 | -- | -- | -- | -- | -- | -- | 470 | -- |
| | 2/22/2005 | N | -- | < 0.1 U | 0.3 | 0.3 | < 0.1 U | -- | 155 | 173 | 21.5 | 24.4 | -- | -- | -- | -- | -- | -- | 650 | -- |
| | 3/22/2005 | N | -- | < 0.1 U | 0.2 | 0.2 | < 0.005 U | -- | 133 | 181 | 22.9 | 33.1 | -- | -- | -- | -- | -- | -- | 470 | -- |
| | 4/20/2005 | N | -- | < 0.1 U | 0.3 | 0.2 | < 0.05 U | -- | 142 | 137 | 21.5 | 22.7 | -- | -- | -- | -- | -- | -- | 520 | -- |
| | 5/31/2005 | N | -- | < 0.1 U | 7.8 | 0.2 | < 0.05 U | -- | 160 | 151 | 23.7 | 25.9 | -- | -- | -- | -- | -- | -- | 590 | -- |
| | 6/22/2005 | N | -- | < 0.05 U | 0.18 | 0.16 | < 0.05 U | -- | 106 | 104 | 16.4 | 17.6 | -- | -- | -- | -- | -- | -- | 510 | -- |
| | 7/13/2005 | N | -- | < 0.1 U | 0.2 | 0.2 | < 0.05 U | -- | 117 | 114 | 16.8 | 17.4 | -- | -- | -- | -- | -- | -- | 590 | -- |
| | 2/7/2006 | N | -- | 0.118 | -- | 0.286 | -- | < 2 U | -- | 184 | 41.5 | 41.5 | < 100 U | < 100 U | < 100 U | < 300 U | < 1200 U | < 4000 U | 628 | 37,300 |
| | 2/7/2006 | FD | -- | 0.117 | -- | 0.319 | -- | < 2 U | -- | 189 | 36.5 | 36.5 | < 100 U | < 100 U | < 100 U | < 300 U | < 1200 U | < 4000 U | 622 | 37,300 |
| | 7/26/2006 | N | -- | 0.288 | -- | 0.0643 | -- | < 2 U | -- | 5.41 | 10.4 | 10.4 | < 10 U | < 10 U | < 10 U | < 30 U | 32 | 2.4 | 772 | 6,450 |
| | 3/27/2007 | N | -- | 0.203 | -- | 0.0592 | -- | < 2 U | -- | 16.4 | 6.21 | 6.21 | < 100 U | < 100 U | < 100 U | < 300 U | 2.1 | 5000 | 832 | -- |



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| 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 | | | | | | | | | | | | | | | | | | |
| IW007 | 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 |
| | 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 | -- | -- | -- | -- | -- | -- | 240 | -- |
| | 7/13/2005 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 2/7/2006 | N | -- | 0.0674 | -- | 0.128 | -- | < 2 U | -- | 156 | 10.4 | 10.4 | < 100 U | < 100 U | < 100 U | < 300 U | < 1200 U | < 2000 U | 382 | 12,300 |
| | 7/26/2006 | N | -- | 0.161 | -- | 0.023 | -- | < 2 U | -- | 3 | 2.86 | 2.86 | < 25 U | < 25 U | < 25 U | < 75 U | 6.1 | 7.7 | 572 | 4,590 |
| | 7/26/2006 | FD | -- | 0.163 | -- | 0.0244 | -- | < 2 U | -- | 3.24 | 2.95 | 2.95 | < 25 U | < 25 U | < 25 U | < 75 U | 6.2 | 4.1 | 531 | 4,660 |
| | 3/23/2007 | N | -- | 0.287 | -- | 0.0249 | -- | 0.1 | -- | 21.2 | 4.09 | 4.09 | < 1 U | < 1 U | < 1 U | < 3 U | 3.9 | 0.082 | 574 | -- |
| | 4/1/2008 | N | -- | 0.144 | -- | 0.0166 | -- | < 1 U | -- | 20.3 | 4.17 | 4.17 | < 5 U | < 5 U | < 5 U | < 15 U | 1.7 | 0.36 | 576 | 3,480 |
| | 3/19/2009 | N | -- | 0.0783 | -- | < 0.015 U | -- | < 1 U | -- | 13.3 | 3.7 | 3.7 | < 5 U | < 5 U | < 5 U | < 15 U | 0.91 | < 0.250 U | 604 | 3,030 |
| | 3/4/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | 0.087 | -- | 2.11 | 3.88 | 3.88 | < 1 U | < 1 U | < 1 U | < 1 U | 0.409 | < 0.05 U | 64.7 | 2,780 |
| | 5/15/2012 | N | 0.0335 J | -- | < 0.0100 U | -- | -- | 0.0747 | 1.39 | -- | 2.86 | -- | < 1.00 UJ | 27.2 J | < 1.00 UJ | < 1.00 UJ | -- | -- | 566 J | 2,430 |
| | 5/7/2013 | N | 0.0192 J | -- | 0.00472 J | -- | -- | < 0.0100 U | 0.679 | -- | 2.6 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 529 | 2,340 |
| | 5/20/2014 | N | 0.00642 J | -- | 0.00377 J | -- | -- | < 0.0500 U | < 0.200 U | -- | 2.21 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 530 | 2,550 |
| | 5/20/2014 | FD | 0.00756 J | -- | 0.00383 J | -- | -- | < 0.0500 U | < 0.200 UJ | -- | 2.24 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 530 | 2,250 |
| | 5/19/2015 | N | 0.0204 | -- | 0.00445 J | -- | -- | < 0.0500 R | < 0.200 UJ | -- | 2.35 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 574 | 2,480 |
| | 5/17/2016 | N | 0.0506 | -- | 0.00425 J | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 490 | 2,130 |
| | 5/8/2017 | N | 0.033 | -- | 0.00545 | -- | < 0.01 U | -- | 5.22 | -- | 1.93 | -- | -- | -- | -- | -- | -- | -- | 608 | 1,900 |
| | 5/8/2017 | FD | 0.0323 | -- | 0.00515 | -- | < 0.01 U | -- | 5.34 | -- | 1.97 | -- | -- | -- | -- | -- | -- | -- | 584 | 1,710 |
| | 3/22/2018 | Reg | -- | 0.0248 | -- | 0.00370 J | -- | < 0.0100 U | 4.24 | -- | -- | 1.58 | -- | -- | -- | -- | -- | -- | 707 | 2,060 |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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 | -- | < 0.01 U | < 0.05 U | 0.05 | < 0.1 U | -- | 30.9 | 36.5 | 5.37 | 6.36 | -- | -- | -- | -- | -- | -- | 1,500 | -- |
| | 7/21/2004 | N | -- | < 0.01 U | 0.05 | 0.09 | < 0.1 U | -- | 80.3 | 89.3 | 18.4 | 21.5 | -- | -- | -- | -- | -- | -- | 2,100 | -- |
| | 8/19/2004 | N | -- | < 0.01 U | 0.06 | 0.06 | < 0.1 U | -- | 54.6 | 57.6 | 3.59 | 4.23 | -- | -- | -- | -- | -- | -- | 2,000 | -- |
| | 10/14/2004 | N | -- | < 0.1 U | < 0.5 U | < 0.5 U | < 0.005 U | -- | 74 | 63 | 5 | 4.7 | -- | -- | -- | -- | -- | -- | 740 | -- |
| | 12/7/2004 | N | -- | < 0.05 U | 0.2 | 0.26 | < 0.05 U | -- | 333 | 403 | 32.9 | 41.8 | -- | -- | -- | -- | -- | -- | 1,100 | -- |
| | 1/12/2005 | N | -- | < 0.01 U | < 0.1 U | < 0.1 U | < 0.1 U | -- | 89 | 97.8 | 5 | 0.38 | -- | -- | -- | -- | -- | -- | 350 | -- |
| | 2/2/2005 | N | -- | < 0.1 U | 1 | 1.4 | < 0.05 U | -- | 95.2 | 147 | 6.6 | 13.5 | -- | -- | -- | -- | -- | -- | 330 | -- |
| | 2/24/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.1 U | -- | 75.5 | 104 | 6.3 | 8.8 | -- | -- | -- | -- | -- | -- | 470 | -- |
| | 3/23/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.005 U | -- | 48.5 | 62.7 | 3.7 | 5.9 | -- | -- | -- | -- | -- | -- | 230 | -- |
| | 4/26/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | 93.5 | 97.3 | 7.5 | 8.2 | -- | -- | -- | -- | -- | -- | 360 | -- |
| | 5/26/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | 52.7 | 84.6 | 5 | 10.3 | -- | -- | -- | -- | -- | -- | 380 | -- |
| | 6/23/2005 | N | -- | < 0.05 U | < 0.05 U | < 0.05 U | < 0.05 U | -- | 37.9 | 39.1 | 2.85 | 3.11 | -- | -- | -- | -- | -- | -- | 320 | -- |
| | 7/14/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | 50.2 | 48.1 | 2.5 | 2.4 | -- | -- | -- | -- | -- | -- | 490 | -- |
| | 2/8/2006 | N | -- | 0.0537 | -- | 0.0694 | -- | < 2 U | -- | 161 | 11.6 | 11.6 | < 100 U | < 100 U | < 100 U | < 300 U | < 600 U | < 4000 U | 624 | 25,000 |
| | 7/26/2006 | N | -- | 0.0257 | -- | 0.0272 | -- | < 2 U | -- | 57 | 11.8 | 11.8 | < 25 U | < 25 U | < 25 U | < 75 U | 1700 | 18 | 908 | 13,600 |
| | 3/22/2007 | N | -- | 0.108 | -- | 0.0317 | -- | < 1 U | -- | 10.8 | 2.41 | 2.41 | < 100 U | < 100 U | < 100 U | < 300 U | 110 | < 5 U | 980 | -- |
| | 3/31/2008 | N | -- | 0.187 | -- | 0.0263 | -- | < 2.0 U | -- | 8.03 | 2.7 | 2.7 | < 5 U | < 5 U | < 5 U | < 15 U | 5.1 | < 0.025 U | 1,080 | 5,340 |
| | 3/18/2009 | N | -- | 0.0874 | -- | < 0.015 U | -- | < 0.002 U | -- | 4.4 | 2.18 | 2.18 | < 5 U | < 5 U | < 5 U | < 15 U | 2.2 | < 0.250 U | 1,000 | 4,320 |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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 | -- |
| | 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 | -- |
| IW012 | 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 |
| | 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 | -- |
| IW013 | 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 |
| | 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 | 0.2 | 0.32 | < 0.05 U | -- | 306 | < 0.4 U | 9.5 | 15.1 | -- | -- | -- | -- | -- | -- | 1,460 | -- |
| | 1/13/2005 | N | -- | < 0.1 U | 0.02 | < 0.1 U | < 0.1 U | -- | < 0.4 U | 147 | < 0.01 U | 1.1 | -- | -- | -- | -- | -- | -- | 490 | -- |
| | 2/3/2005 | N | -- | < 0.1 U | 0.1 | 0.1 | < 0.1 U | -- | 106 | 105 | 3.5 | 3.3 | -- | -- | -- | -- | -- | -- | 340 | -- |
| | 2/24/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.1 U | -- | 57.7 | 78.4 | 2.5 | 3.4 | -- | -- | -- | -- | -- | -- | 520 | -- |
| | 3/24/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.005 U | -- | 55.6 | 56.7 | 1.1 | 1.1 | -- | -- | -- | -- | -- | -- | 220 | -- |
| | 4/26/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | 83 | 83.3 | 1.1 | 1.1 | -- | -- | -- | -- | -- | -- | 230 | -- |
| | 5/25/2005 | N | -- | < 0.01 U | 0.05 | < 0.01 U | < 0.05 U | -- | 39.3 | 5.52 | 0.61 | 0.09 | -- | -- | -- | -- | -- | -- | 180 | -- |
| | 6/28/2005 | N | -- | < 0.05 U | 0.08 | 0.08 | < 0.05 U | -- | 92.3 | 96.4 | 1.46 | 1.54 | -- | -- | -- | -- | -- | -- | 330 | -- |
| | 7/14/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | 65.4 | 65.9 | 0.7 | 0.7 | -- | -- | -- | -- | -- | -- | 460 | -- |
| IW014 | 2/13/2006 | N | -- | 0.0518 | -- | 0.199 | -- | < 10 U | -- | 466 | 5.3 | 5.3 | < 100 U | < 100 U | < 100 U | < 300 U | < 1200 U | < 2500 U | 666 | 34,100 |
| | 2/13/2006 | FD | -- | 0.0524 | -- | 0.202 | -- | < 2 U | -- | 485 | 5.32 | 5.32 | < 100 U | < 100 U | < 100 U | < 300 U | < 1200 U | < 1800 U | 565 | 33,000 |
| | 7/25/2006 | N | -- | 0.047 | -- | 0.072 | -- | < 2 U | -- | 228 | 3.34 | 3.34 | 98 | < 25 U | < 500 U | < 75 U | 2400 | 70 | 964 | 18,600 |
| | 7/25/2006 | FD | -- | 0.0484 | -- | 0.0755 | -- | < 2 U | -- | 218 | 3.48 | 3.48 | 31 | < 20 U | < 500 U | < 500 U | 2600 | 56 | 1,010 | 19,000 |
| | 3/26/2007 | N | -- | 0.0877 | -- | 0.0494 | -- | < 2 U | -- | 144 | 2.43 | 2.43 | < 100 U | < 100 U | < 100 U | < 300 U | 1700 | 9.9 | 1,080 | -- |
| | 3/28/2007 | N | -- | 0.0819 | -- | -- | -- | -- | -- | 141 | 2.4 | 2.4 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 3/26/2008 | N | -- | 0.173 | -- | 0.075 | -- | < 1 U | -- | 14.9 | 0.678 | 0.678 | < 50 U | < 50 U | < 50 U | < 150 U | 170 | < 2.5 U | 1,170 | 6,360 |
| | 3/18/2009 | N | -- | 0.229 | -- | 0.0188 | -- | < 0.002 U | -- | 1.59 | 0.413 | 0.413 | < 5 U | < 5 U | < 5 U | < 15 U | 4.1 | < 0.25 U | 1,190 | 5,750 |
| | 3/3/2010 | N | -- | < 0.50 U | -- | < 0.50 U | -- | -- | -- | 8.19 | < 0.50 U | < 0.50 U | < 1 U | 2.3 | < 1 U | < 1 U | 1.49 | < 0.05 U | 1,090 | 4,140 |
| | 5/15/2012 | N | 0.0336 J | -- | < 0.0200 U | -- | -- | 0.54 | 1.71 | -- | 0.388 | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | 1150 J | 3,640 |

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| | | 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** | -- | **0.334** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **406** | **1,490** |
| | 5/20/2014 | N | **0.00577 J** | -- | < 0.0100 U | -- | -- | < 0.0500 U | < 0.200 U | -- | **0.225** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **478** | **1,660** |
| | 5/13/2015 | N | < 0.0200 U | -- | **0.00159 J** | -- | -- | < 0.0500 U | **0.125 J** | -- | **0.16** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **479** | **1,770** |
| | 5/17/2016 | N | **0.00625 J** | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **291** | **1,340** |
| | 5/8/2017 | N | **0.00501** | -- | < 0.004 U | -- | < 0.01 UJ | -- | **0.0498** | -- | **0.0772** | -- | -- | -- | -- | -- | -- | -- | **328** | **1,270** |
| IW018 | 2/6/2006 | N | -- | **0.112** | -- | **2.88** | -- | **0.27** | -- | **10.1** | **0.512** | **0.512** | **2.2** | < 1 U | < 1 U | < 3 U | **3.3** | < 0.6 U | **1,340** | **4,040** |
| | 7/21/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.295** | **0.295** | < 1 U | < 1 U | < 1 U | < 3 U | **3.8** | < 0.05 U | **400** | **1,700** |
| | 4/9/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **0.705** | **0.5** | **0.5** | < 1 U | < 1 U | < 1 U | < 3 U | **2.2** | < 0.05 U | **175** | -- |
| | 4/9/2008 | N | -- | **0.051** | -- | **1.08** | -- | **0.29** | -- | **3.16** | **0.438** | **0.438** | < 1 U | < 1 U | < 1 U | < 3 U | **2.3** | < 0.05 U | **1,140** | **3,260** |
| | 3/24/2009 | N | -- | < 0.02 U | -- | **0.248** | -- | **0.18** | -- | < 0.2 U | **0.92** | **0.92** | < 1 U | < 1 U | < 1 U | < 3 U | **3.1** | < 0.05 U | **1,130** | **3,080** |
| | 3/25/2010 | N | -- | < 0.05 U | -- | **0.305** | -- | **0.218** | -- | **0.14** | **0.527** | **0.527** | < 1 U | < 1 U | < 1 U | < 1 U | **1.74** | **0.065** | **535** | **1,870** |
| | 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 | -- | -- | **66.7 J** | **792** |
| | 5/10/2013 | N | **0.0309** | -- | **1.17** | -- | -- | **0.856** | **1.94** | -- | **1.43** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **932** | **3,520** |
| | 5/20/2014 | N | **0.00653 J** | -- | **0.00193 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.348** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **532** | **1,640** |
| | 5/8/2015 | N | **0.0144 J** | -- | **0.00519 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.416** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **599** | **1,890** |
| | 5/8/2015 | FD | **0.0146 J** | -- | **0.00457 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.411** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **550** | **1,810** |
| | 5/19/2016 | N | **0.0373** | -- | **0.879** | -- | **0.548** | -- | -- | -- | -- | -- | < 0.408 U | < 1 U | < 0.657 U | < 0.642 U | < 0.986 U | < 0.986 U | **796** | **3,250** |
| | 2/7/2006 | N | -- | < 0.02 U | -- | **1.06** | -- | **0.88** | -- | < 0.2 U | **0.0405** | **0.0405** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **1,780** | **4,960** |
| | 7/24/2006 | N | -- | < 0.02 U | -- | **1.14** | -- | **0.99** | -- | < 0.2 U | **0.0314** | **0.0314** | < 1 U | < 1 U | < 1 U | < 3 U | **0.93** | < 0.05 U | **1,800** | **5,030** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| | | 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 | < 1.00 U | < 1.00 U | -- | -- | 437 | 2,210 |
| | 5/19/2016 | N | 0.0275 | -- | 0.149 | -- | 0.125 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 581 | 2,430 |
| | 5/5/2017 | N | 0.00833 | -- | 0.171 | -- | 0.178 | -- | < 0.02 U | -- | < 0.002 U | -- | -- | -- | -- | -- | -- | -- | 739 | 3,070 |
| IW023 | 2/7/2006 | N | -- | < 0.02 U | -- | 0.552 | -- | 0.52 | -- | 1.08 | 0.0441 | 0.0441 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 506 | 2,400 |
| | 7/25/2006 | N | -- | < 0.02 U | -- | 0.158 | -- | 0.15 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | 500 | 1,950 |
| | 4/10/2007 | N | -- | < 0.02 U | -- | 0.206 | -- | 0.21 | -- | 0.215 | 0.0069 | 0.0069 | 1 | < 1 U | < 1 U | < 3 U | < 0.099 U | < 0.05 U | 620 | -- |
| | 4/7/2008 | N | -- | < 0.02 U | -- | 0.248 | -- | 0.20 * | -- | 2.02 | 0.0342 | 0.0342 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | 659 | 2,350 |
| | 3/16/2009 | N | -- | < 0.02 U | -- | 0.285 | -- | 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 | 650 | 2,560 |
| | 8/11/2009 | N | -- | < 0.02 U | -- | 0.3 | -- | 0.28 | -- | < 0.3 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | 637 | 2,700 |
| | 3/2/2010 | N | -- | < 0.05 U | -- | 0.32 | -- | 0.325 | -- | < 0.05 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | < 0.052 U | < 0.05 U | 629 | 3,130 |
| | 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 | -- | -- | 536 | 1,950 |
| | 5/13/2013 | N | 0.00985 J | -- | 0.0108 | -- | -- | 0.00760 J | 0.0262 J | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 537 | 1,680 |
| | 5/21/2014 | N | 0.00892 J | -- | 0.0189 | -- | -- | 0.0177 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 586 | 2,190 |
| | 5/21/2014 | FD | < 0.0200 U | -- | 0.0161 | -- | -- | 0.0181 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 588 | 2,470 |
| | 5/7/2015 | N | 0.0138 J | -- | 0.0156 | -- | -- | 0.0111 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 576 | 1,960 |
| | 5/19/2016 | N | 0.0238 | -- | 0.419 | -- | 0.402 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 662 | 3,380 |
| | 5/5/2017 | N | 0.00817 | -- | 0.397 | -- | 0.41 | -- | < 0.02 U | -- | < 0.002 U | -- | -- | -- | -- | -- | -- | -- | 729 | 2,900 |
| | 9/22/2017 | N | 0.00936 | -- | 0.423 | -- | 0.406 | -- | 0.0417 J | -- | 0.00149 J | -- | -- | -- | -- | -- | -- | -- | 631 | 2,990 |
| | 3/29/2018 | Reg | -- | 0.00871 | -- | 0.378 | -- | 0.369 | < 0.1 | -- | -- | 0.000378 J | -- | -- | -- | -- | -- | -- | 644 | 2,760 |
| | 9/14/2018 | Reg | 0.0102 | -- | 0.376 | -- | 0.307 | -- | -- | < 0.100 U | 0.000254 J | -- | -- | -- | -- | -- | -- | -- | 645 | 2,790 |
| | 9/14/2018 | FD | 0.0101 | -- | 0.383 | -- | 0.269 | -- | -- | < 0.100 U | < 0.00200 U | -- | -- | -- | -- | -- | -- | -- | 638 | 2,880 |
| | 2/8/2006 | N | -- | < 0.02 U | -- | 1.28 | -- | 1.2 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 868 | 3,490 |
| | 7/21/2006 | N | -- | < 0.02 U | -- | 1.29 | -- | 0.27 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | 934 | 3,710 |
| | 4/3/2007 | N | -- | < 0.02 U | -- | 1.12 | -- | 1.3 | -- | < 0.2 U | 0.0061 | 0.0061 | < 1 U | < 1 U | < 1 U | < 3 U | 0.12 | < 0.05 U | 827 | -- |
| | 4/15/2008 | N | -- | < 0.02 U | -- | 1.41 | -- | 1.3 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.11 U | < 0.05 U | 808 | 3,440 |
| | 3/16/2009 | N | -- | < 0.02 U | -- | 1.31 | -- | 0.91 | -- | < 0.2 U | 0.847 | 0.847 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | 985 | 4,080 |

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Received by OCD: 3/25/2020 3:43:14 PM

| 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 | 2,930 |
| | 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 | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 167 | 1,660 |
| | 5/29/2015 | N | 0.00572 J | -- | 0.0137 | -- | -- | 0.0102 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 120 | 910 |
| | 5/19/2016 | N | 0.0229 | -- | 0.311 | -- | 0.282 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 489 | 2,610 |
| | 5/4/2017 | N | 0.00815 | -- | 0.282 | -- | 0.293 | -- | 0.189 | -- | 0.00787 | -- | -- | -- | -- | -- | -- | -- | 430 | 2,320 |
| IW028 | 6/16/2005 | N | -- | < 0.01 U | 0.54 | 0.49 | 0.88 | -- | 0.99 | < 0.4 U | 0.04 | 0.02 | -- | -- | -- | -- | -- | -- | 530 | -- |
| | 2/8/2006 | N | -- | < 0.02 U | -- | 0.991 | -- | 0.99 | -- | < 0.2 U | 0.0079 | 0.0079 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 682 | 3,100 |
| | 7/21/2006 | N | -- | < 0.02 U | -- | 0.652 | -- | 0.62 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | 549 | 2,700 |
| | 4/4/2007 | N | -- | < 0.02 U | -- | 0.526 | -- | 0.67 | -- | 0.653 | 0.0202 | 0.0202 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.1 U | < 0.05 U | 522 | -- |
| | 4/15/2008 | N | -- | < 0.02 U | -- | 0.727 | -- | 0.74 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.1 U | < 0.05 U | 625 | 2,670 |
| | 4/7/2009 | N | -- | < 0.02 U | -- | 0.354 | -- | 0.35 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.099 U | < 0.05 U | 583 | 2,640 |
| | 3/8/2010 | N | -- | < 0.05 U | -- | 0.509 | -- | 0.547 | -- | < 0.03 U | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | < 0.055 U | < 0.05 U | 633 | 2,920 |
| | 5/22/2012 | N | < 0.0100 U | -- | 0.0203 | -- | -- | 0.0144 | < 0.200 U | -- | 0.0258 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 200 | 1,660 |
| | 5/22/2012 | FD | < 0.0100 U | -- | 0.0185 | -- | -- | 0.0132 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 202 | 1,340 |
| | 9/6/2012 | N | -- | -- | -- | 0.0185 | -- | 0.015 | < 0.200 U | < 0.200 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 5/15/2013 | N | 0.0110 J | -- | 0.0202 | -- | -- | 0.0127 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 140 | 1,300 |
| | 11/4/2013 | N | -- | -- | 0.0394 | 0.0394 | -- | 0.0302 | < 0.200 U | < 0.200 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 5/22/2014 | N | < 0.0200 U | -- | 0.0369 | -- | -- | 0.0341 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 201 | 1,350 |
| | 5/29/2015 | N | 0.0103 J | -- | 0.024 | -- | -- | 0.0209 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 111 | 1,010 |
| | 5/19/2016 | N | 0.022 | -- | 0.501 | -- | 0.642 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 506 X | 2,990 |
| | 5/19/2016 | FD | 0.0225 | -- | 0.287 | -- | 0.679 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 514 | 1,110 |
| | 5/4/2017 | N | 0.00949 | -- | 0.694 | -- | 0.758 | -- | < 0.02 U | -- | 0.00436 | -- | -- | -- | -- | -- | -- | -- | 702 | 2,740 |
| | 6/21/2012 | N | -- | 0.00504 | -- | 0.00748 | -- | -- | -- | -- | -- | -- | < 1.00 U | < 1.00 U | < 1.00 U | < 1.00 U | -- | -- | -- | -- |
| | 7/10/2012 | N | -- | -- | -- | 0.112 | -- | 0.144 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/6/2012 | N | -- | -- | -- | 0.208 | -- | 0.108 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| 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**<br>**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<br>< 0.05 U | -- | **0.03**<br>**< 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** | -- | -- | -- | -- | -- | < 2 U | < 2 U | **18** | **24** | < 0.25 U | **0.14** | **270** | -- |
| | 6/5/2003 | N | -- | -- | -- | -- | **0.024** | -- | -- | -- | -- | -- | **3** | **4** | **52** | **69** | < 0.24 U | **0.39** | **510** | -- |
| | 6/5/2003 | FD | -- | -- | -- | -- | **0.026** | -- | -- | -- | -- | -- | < 2 U | **3** | **40** | **54** | **0.32** | **0.32** | **530** | -- |
| | 1/26/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | **20** | **20** | **630** | **200** | **7.2** | **2.8** | **90** | -- |
| | 1/26/2004 | FD | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | **20** | **30** | **610** | **190** | **4.4** | **2.3** | **90** | -- |
| | 7/28/2004 | N | -- | -- | < 0.01 U | -- | **0.005** | -- | -- | -- | -- | -- | **10** | **8** | **150** | **57** | < 2.5 U | **1.6** | **630** | -- |
| | 1/12/2005 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | **4** | < 2 U | **47** | < 6 U | < 0.25 U | **0.22** | **200** | -- |
| | 5/26/2005 | N | -- | -- | **0.02** | -- | -- | -- | -- | -- | -- | -- | **20** | **4** | **73** | **23** | < 0.25 U | **0.44** | **230** | -- |
| | 1/27/2006 | N | -- | < 0.02 U | -- | **0.0343** | -- | < 0.02 U | -- | **2.74** | **0.832** | **0.832** | **1.7** | < 1 U | **44** | **3.3** | < 0.6 U | < 0.6 U | **338** | **2,160** |
| | 1/27/2006 | FD | -- | < 0.02 U | -- | **0.0349** | -- | < 0.02 U | -- | **2.9** | **0.828** | **0.828** | **1.7** | < 1 U | **46** | **3.2** | < 0.6 U | < 0.6 U | **346** | **2,160** |
| | 7/13/2006 | N | -- | < 0.02 U | -- | **0.0308** | -- | < 0.02 U | -- | **2.18** | **0.766** | **0.766** | **89** | < 1 U | **37** | **4.2** | **0.54** | **0.3** | **368** | **2,290** |
| | 4/19/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **4.09** | **0.895** | **0.895** | **36** | < 1 U | **110** | **9.5** | **0.5** | **0.38** | **327** | -- |
| | 4/17/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.2 U | -- | **0.644** | **1.53** | **1.53** | < 1 U | < 1 U | **1.6** | < 3 U | **0.41** | < 0.05 U | **112** | **3,050** |
| | 3/16/2010 | N | -- | < 0.05 U | -- | < 0.050 U | -- | **0.024** | -- | **0.205** | **1.08** | **1.08** | < 1 U | < 1 U | **1.56** | < 1 U | **0.416** | < 0.05 U | **120** | **2,950** |
| | 5/24/2012 | N | < 0.0100 U | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **1.31** | -- | < 1.00 U | < 2.00 U | **2.36** | < 1.00 U | -- | -- | **131** | **2,970** |
| | 5/21/2013 | N | < 0.0200 U | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **2.6** | -- | < 1.00 U | < 2.00 U | **6.61** | < 1.00 U | -- | -- | **127** | **2,780** |
| | 5/6/2014 | N | < 0.0200 U | -- | **0.113** | -- | -- | **0.112** | < 0.200 U | -- | **0.26** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **429** | **3,240** |



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ARCADIS Design & Consultancy for natural and built assets

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| 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 | | | | | | | | | | | | | | | | | | |
| MW002 | 6/2/2015 | N | < 0.0200 U | -- | **0.00117 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **1.72** | -- | < 1.00 U | < 2.00 U | **2.46** | **1.82** | -- | -- | **333** | **2,490** |
| | 5/20/2016 | N | **0.00405 J** | -- | **0.767** | -- | **0.881** | -- | -- | -- | -- | -- | < 0.408 U | < 1 U | < 0.657 U | < 0.642 U | < 0.987 U | < 0.987 U | **496** | **3,240** |
| | 5/10/2017 | N | **0.00199 J** | -- | **0.0181** | -- | < 0.01 U | -- | **0.0102 J** | -- | **0.91** | -- | < 2 U | < 2 U | **36.4** | < 2 U | < 1.5 U | < 1.5 U | **408** | **2,500** |
| | 5/10/2017 | FD | **0.00185 J** | -- | **0.02** | -- | **0.0135** | -- | **0.0125 J** | -- | **0.937** | -- | < 2 U | < 2 U | **31.5** | < 2 U | < 1.5 U | < 1.5 U | **475** | **2,580** |
| | 9/26/2017 | N | **0.00221** | -- | **0.00906** | -- | < 0.01 U | -- | < 0.1 U | -- | **0.694** | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 1.5 U | < 1.5 U | **482** | **2,810** |
| | 4/4/2018 | Reg | -- | **0.00154 J** | -- | **0.00146 J** | -- | < 0.0100 U | < 0.100 U | -- | -- | **0.739** | < 2 U | < 2 U | < 2 U | < 2 U | < 1.50 U | < 1.50 U | **292** | **2,350** |
| | 9/11/2018 | Reg | **0.00241 J** | -- | **0.00146 J** | -- | < 0.0100 U | -- | -- | < 0.100 U | **0.584** | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | < 1.50 U | **275** | **2,610** |
| | 4/22/1997 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 1 U | -- | -- | -- | -- |
| | 4/23/1997 | N | < 0.10 U | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **350** | **1,200** |
| | 1/20/1999 | N | < 0.10 U | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **350** | **1,100** |
| | 11/17/1999 | N | -- | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **470** | **1,400** |
| | 5/22/2001 | N | -- | < 0.05 U | -- | < 0.05 U | -- | **0.039** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **490** | **1,210** |
| | 1/24/2002 | N | -- | -- | < 0.05 U | -- | **0.015** | -- | < 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 | **470** | **1,460** |
| | 9/16/2002 | N | -- | -- | < 0.05 U | -- | **0.024** | -- | -- | -- | -- | -- | < 2 U | **2** | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **460** | -- |
| | 12/18/2002 | N | -- | -- | -- | -- | **0.018** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **510** | -- |
| | 3/13/2003 | N | -- | -- | -- | -- | **0.033** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **470** | -- |
| | 5/28/2003 | N | -- | -- | -- | -- | **0.032** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.23 U | < 0.05 U | **430** | -- |
| | 1/20/2004 | N | -- | -- | **0.02** | -- | **0.013** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.27 U | < 0.05 U | **400** | -- |
| | 6/23/2004 | N | -- | -- | **0.02** | -- | **0.016** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **410** | -- |
| | 6/23/2004 | FD | -- | -- | **0.02** | -- | **0.015** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **400** | -- |
| | 1/4/2005 | N | -- | -- | **0.03** | -- | **0.025** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **440** | -- |
| | 1/4/2005 | FD | -- | -- | **0.03** | -- | **0.033** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **430** | -- |
| | 6/6/2005 | N | -- | -- | **0.06** | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **410** | -- |
| | 1/24/2006 | N | -- | < 0.02 U | -- | **0.0642** | -- | **0.058** | -- | **0.999** | **0.0147** | **0.0147** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **552** | **1,700** |
| | 7/6/2006 | N | -- | < 0.02 U | -- | **0.0339** | -- | **0.037** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **553** | **1,790** |
| | 4/12/2007 | N | -- | < 0.02 U | -- | **0.0699** | -- | **0.064** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **817** | -- |
| | 4/2/2008 | N | -- | < 0.02 U | -- | **0.147** | -- | **0.15** | -- | < 0.2 U | < 0.005 U | < 0.005 U | **4.5** | **1.4** | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **934** | **2,730** |
| | 3/31/2009 | N | -- | < 0.02 U | -- | **0.137** | -- | **0.13** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.19** | < 0.05 U | **1,040** | **3,290** |
| | 3/8/2010 | N | -- | < 0.05 U | -- | **0.145** | -- | **0.15** | -- | < 0.03 U | < 0.05 U | < 0.05 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.234** | < 0.05 U | **998** | **3,500** |
| | 5/24/2012 | N | < 0.0100 U | -- | **0.0567** | -- | -- | **0.072** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,210** | **4,640** |
| | 5/21/2013 | N | **0.0120 J** | -- | **0.0452** | -- | -- | **0.0475** | < 0.200 UJ | -- | **0.00403 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,130** | **4,130** |
| | 5/22/2014 | N | **0.00951 J** | -- | **0.0382** | -- | -- | **0.0364** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **912** | **3180 J** |
| | 6/4/2015 | N | **0.0203** | -- | **0.0429** | -- | -- | **0.0427** | < 0.200 UJ | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **811** | **3,090** |
| | 5/20/2016 | N | **0.014** | -- | **0.105** | -- | **0.094** | -- | -- | -- | -- | -- | < 0.408 U | < 1 U | < 0.657 U | < 0.642 U | < 0.986 U | < 0.986 U | **724** | **2,810** |
| | 5/9/2017 | N | **0.00922 J** | -- | **0.285** | -- | **0.271** | -- | < 0.1 U | -- | **0.00199 J** | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 1.5 U | < 1.5 U | **845** | **2,750** |
| MW002A | 12/9/2002 | N | -- | < 0.05 U | < 0.05 U | -- | **0.029** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.5 U | < 0.05 U | **450** | **1,330** |
| | 3/12/2003 | N | -- | -- | -- | -- | **0.036** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **670** | -- |
| | 5/28/2003 | N | -- | -- | -- | -- | **0.031** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **730** | -- |
| | 1/20/2004 | N | -- | -- | **0.02** | -- | **0.011** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **430** | -- |
| | 6/23/2004 | N | -- | -- | **0.02** | -- | **0.022** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **510** | -- |
| | 1/4/2005 | N | -- | -- | **0.04** | -- | **0.029** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **510** | -- |
| | 6/6/2005 | N | -- | -- | **0.03** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **450** | -- |
| | 1/24/2006 | N | -- | < 0.02 U | -- | **0.0268** | -- | **0.026** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **506** | **1,340** |
| | 7/6/2006 | N | -- | **0.0202** | -- | **0.0787** | -- | **0.068** | -- | < 0.2 U | **0.0051** | **0.0051** | < 1 U | < 1 U | < 1 U | < 3 U | **0.46** | < 0.05 U | **848** | **1,980** |
| | 4/12/2007 | N | -- | < 0.02 U | -- | **0.0586** | -- | **0.045** | -- | < 0.2 U | **0.0115** | **0.0115** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **729** | -- |
| | 4/2/2008 | N | -- | **0.0222** | -- | **0.278** | -- | **0.27** | -- | < 0.2 U | **0.0363** | **0.0363** | **15** | **3.2** | **1.2** | < 3 U | **0.74** | < 0.05 U | **1,460** | **2,820** |
| | 3/31/2009 | N | -- | < 0.02 U | -- | **0.333** | -- | **0.34** | -- | < 0.2 U | **0.0228** | **0.0228** | < 1 U | < 1 U | < 1 U | < 3 U | **0.51** | < 0.05 U | **1,160** | **2,750** |
| | 3/8/2010 | N | -- | < 0.05 U | -- | **0.431** | -- | **0.437** | -- | < 0.03 U | < 0.05 U | < 0.05 U | **1.1** | < 1 U | < 1 U | < 1 U | **0.515** | < 0.05 U | **1,170** | **1,660** |
| | 5/24/2012 | N | < 0.0100 U | -- | **0.0298** | -- | -- | **0.0254** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **337** | **1,260** |
| | 5/21/2013 | N | **0.00953 J** | -- | **0.0205** | -- | -- | **0.0168** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **346** | **1,180** |
| | 5/22/2014 | N | **0.0108 J** | -- | **0.0207** | -- | -- | **0.0161** | < 0.200 U | -- | < 0.0200 UJ | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **341** | **1,090** |
| | 6/4/2015 | N | **0.0193 J** | -- | **0.00936 J** | -- | -- | < 0.0100 U | < 0.200 UJ | -- | **0.00965 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **372** | **1,050** |
| | 5/20/2016 | N | **0.0227** | -- | **0.664** | -- | **0.462** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,350** | **3,310** |
| | 5/9/2017 | N | **0.0164** | -- | **0.709** | -- | **0.781** | -- | < 0.1 U | -- | **0.0235** | -- | -- | -- | -- | -- | -- | -- | **1,400** | **3,510** |
| | 9/22/2017 | N | **0.0204** | -- | **0.867** | -- | **0.892** | -- | **0.0591 J** | -- | **0.0234** | -- | -- | -- | -- | -- | -- | -- | **1,310** | **3,550** |
| | 4/4/2018 | Reg | -- | **0.0146** | -- | **0.638** | -- | **0.724** | < 0.100 U | -- | -- | **0.0163** | -- | -- | -- | -- | -- | -- | **1,620** | **3,010** |
| | 9/14/2018 | Reg | **0.0195** | -- | **0.963** | -- | **0.796** | -- | -- | < 0.100 U | **0.0193** | -- | -- | -- | -- | -- | -- | -- | **1,610** | **3,330** |
| | 4/22/1997 | N | < 0.10 U | -- | **0.36** | -- | -- | -- | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 1 U | -- | -- | **430** | **2,000** |
| | 6/11/1997 | N | < 0.10 U | -- | **0.22** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 5/24/2001 | N | -- | < 0.05 U | -- | **2.9** | -- | **3** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **1,100** | **4,700** |
| | 1/30/2002 | N | -- | -- | **1.45** | -- | **1.1** | -- | < 0.1 U | < 0.1 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | **900** | **2,320** |
| | 1/30/2002 | FD | -- | -- | **1.41** | -- | **1.3** | -- | < 0.1 U | < 0.1 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | **1,900** | **3,580** |
| | 9/18/2002 | N | -- | -- | **1.85** | -- | **1.1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **850** | **3,960** |
| | 1/6/2003 | N | -- | -- | -- | -- | **0.47** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **640** | -- |
| | 3/19/2003 | N | -- | -- | -- | -- | **1.3** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,050** | -- |
| | 6/4/2003 | N | -- | -- | -- | -- | **0.907** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **950** | -- |
| | 1/20/2004 | N | -- | -- | **0.14** | -- | **0.13** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **500** | -- |
| | 6/29/2004 | N | -- | -- | **0.5** | -- | **0.38** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **740** | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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**<br>**< 0.05 U** | -- | **0.61**<br>**< 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** | -- |
| | 12/30/2002 | N | -- | -- | -- | -- | **0.14** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **480** | -- |
| | 3/13/2003 | N | -- | -- | -- | -- | **0.14** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **480** | -- |
| | 6/4/2003 | N | -- | -- | -- | -- | **0.166** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **490** | -- |
| | 1/19/2004 | N | -- | -- | **0.07** | -- | **0.033** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **280** | -- |
| | 6/24/2004 | N | -- | -- | **0.09** | -- | **0.106** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **580** | -- |
| | 1/4/2005 | N | -- | -- | **0.15** | -- | **0.08** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **360** | -- |
| | 6/6/2005 | N | -- | -- | **0.13** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **340** | -- |
| | 1/25/2006 | N | -- | < 0.02 U | -- | **0.175** | -- | **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 | **483** | **1,440** |
| | 7/7/2006 | N | -- | < 0.02 U | -- | **0.177** | -- | **0.18** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.094 U | < 0.05 U | **373** | **1,460** |
| | 4/16/2007 | N | -- | < 0.02 U | -- | **0.265** | -- | **0.28** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.1** | < 0.05 U | **523** | -- |
| | 4/3/2008 | N | -- | **0.0203** | -- | **0.334** | -- | **0.23** | -- | < 0.2 U | < 0.005 U | < 0.005 U | **12** | **2.5** | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **571** | **1,740** |
| | 3/30/2009 | N | -- | -- | -- | **0.271** | -- | **0.25** | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 3 U | **0.11** | < 0.05 U | **465** | -- |
| | 3/31/2009 | N | -- | **0.0257** | -- | -- | -- | -- | -- | **986** | **13** | **13** | -- | -- | -- | -- | -- | -- | -- | **1,700** |
| | 3/8/2010 | N | -- | < 0.05 U | -- | **0.309** | -- | **0.295** | -- | **0.137** | < 0.05 U | < 0.05 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.091** | < 0.05 U | **473** | **1,740** |
| | 5/22/2012 | N | < 0.0100 U | -- | **0.385** | -- | -- | **0.401** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **620** | **2,520** |
| | 5/15/2013 | N | **0.0124 J** | -- | **0.00738 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **326** | **1,300** |
| | 5/21/2014 | N | **0.0131 J** | -- | **0.403** | -- | -- | **0.431** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **606** | **2,630** |
| | 5/28/2015 | N | < 0.0200 U | -- | **0.000821 J** | -- | -- | **0.00650 J** | < 0.200 U | -- | **0.0103 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **260** | **1,180** |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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 | | | | | | | | | | | | | | | | | | |
| MW005 | 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** |
| | 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** |
| | 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** |
| MW007 | 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**<br>**< 0.05 U** | -- | **0.4**<br>**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 | -- | < 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 | -- | < 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 | -- | < 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 | -- | < 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** |



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| 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<br>0.327 | -- | 0.319 | < 0.200 U | < 0.200 U<br>< 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 |
| | 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<br>0.44 | 0.68<br>0.79 | < 0.5 U<br>< 0.5 U | 0.8<br>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 |
| MW008 | 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 |



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| 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<br>5.32 | 5.01<br>4.89 | 4.6<br>4 | 4<br>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 | -- |



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| | | 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 | < 0.6 U | < 0.6 U | 253 | 1,510 |
| | 7/13/2006 | 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 | < 0.094 U | < 0.05 U | 255 | 1,460 |
| | 4/15/2008 | N | -- | < 0.02 U | -- | 0.0198 | -- | < 0.02 U | -- | 0.591 | 0.0085 | 0.0085 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.1 U | < 0.05 U | 384 | 1,990 |
| | 3/26/2009 | N | -- | < 0.02 U | -- | 0.0219 | -- | < 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 | 584 | 2,100 |
| | 3/8/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | 0.045 | -- | < 0.03 U | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | < 0.05 U | < 0.05 U | 261 | 1,750 |
| | 5/22/2012 | N | < 0.0100 U | -- | 0.0249 | -- | -- | 0.0143 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 224 | 1,510 |
| | 5/15/2013 | N | < 0.0200 U | -- | 0.0196 | -- | -- | 0.0136 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 132 | 1,180 |
| | 5/6/2014 | N | < 0.0200 U | -- | 0.031 | -- | -- | 0.0141 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 125 | 1,540 |
| | 6/1/2015 | N | 0.00769 J | -- | 0.0203 | -- | -- | 0.0148 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 106 | 1,080 |
| | 5/19/2016 | N | 0.00943 J | -- | 0.0207 | -- | 0.0129 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 126 | 1,340 |
| | 5/4/2017 | N | 0.00655 | -- | 0.0151 | -- | 0.0115 | -- | < 0.02 U | -- | 0.0111 | -- | -- | -- | -- | -- | -- | -- | 120 | 1,010 |
| | 10/23/1997 | N | < 0.10 U | -- | 1.5 | -- | -- | -- | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 1 U | -- | -- | 910 | 3,600 |
| | 1/21/1999 | N | < 0.10 U | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 780 | 2,930 |
| | 5/24/2001 | N | -- | < 0.05 U | -- | < 0.05 U | -- | 1.4 | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | 700 | 3,260 |
| | 9/27/2001 | N | -- | -- | 1.4 | -- | 1.3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 1/28/2002 | N | -- | -- | 1.36 | -- | 1.2 | -- | < 0.1 U | < 0.1 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | 1,190 | 3,470 |
| | 9/18/2002 | N | -- | -- | 1.31 | -- | 0.7 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 590 | -- |
| | 9/18/2002 | FD | -- | -- | 1.31 | -- | 0.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 790 | -- |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| 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** |
| | 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**<br>**< 0.05 U** | -- | **0.28**<br>**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** | -- |
| MW010 | 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** | -- | **0.0235** | -- | -- | **0.022** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **2,440** | **6,280** |
| | 11/4/2013 | N | < 0.0200 U | -- | **0.0258** | -- | -- | **0.0193** | < 0.200 U | -- | **0.0554** | -- | **6.15** | **6.82** | **2.93** | **2.67** | -- | -- | **2,430** | **6,240** |
| | 5/7/2014 | N | **0.00572 J** | -- | **0.034** | -- | **0.0336** | -- | **0.0656 J** | -- | < 0.0200 UJ | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **2,360** | **5,380** |
| | 11/5/2014 | N | **0.0166 J** | -- | **0.0168** | -- | **0.0114** | -- | **0.246** | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,990** | **4,510** |
| | 11/5/2014 | FD | **0.00674 J** | -- | **0.0154** | -- | **0.00870 J** | -- | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,490** | **4,460** |
| | 5/27/2015 | N | **0.00790 J** | -- | **0.00879 J** | -- | -- | **0.00780 J** | < 0.200 U | -- | **0.00483 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,500** | **4,490** |
| | 11/4/2015 | N | **0.00870 J** | -- | **0.00708 J** | -- | -- | **0.00660 J** | **0.00951 J** | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **1,340** | **4,120** |
| | 5/16/2016 | N | **0.0561** | -- | **0.0406** | -- | **0.0513** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3,050** | **6,480** |
| | 9/20/2016 | N | < 0.00336 U | -- | **0.0528** | -- | **0.0407** | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **2,500** | **7,610** |
| | 5/9/2017 | N | **0.00884** | -- | **0.0295** | -- | **0.0271** | -- | **0.0314** | -- | **0.00459** | -- | -- | -- | -- | -- | -- | -- | **2,730** | **6,960** |
| | 9/21/2017 | N | **0.00803** | -- | **0.0190 J** | -- | -- | **0.00310 J** | < 0.100 U | -- | **0.0104** | -- | -- | -- | -- | -- | -- | -- | **2,360** | **5,620** |
| | 4/2/2018 | Reg | -- | **0.00889** | -- | **0.0242** | -- | **0.0157** | < 0.100 U | -- | -- | **0.000740 J** | -- | -- | -- | -- | -- | -- | **2,920** | **4,910** |
| | 9/13/2018 | Reg | **0.00939 J** | -- | **0.0228** | -- | **0.012** | -- | -- | < 0.500 U | **0.00206 J** | -- | -- | -- | -- | -- | -- | -- | **2,550** | **4,990** |
| | 1/20/1999 | N | < 0.10 U | -- | **4.6** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **990** | **3,600** |
| | 11/18/1999 | N | -- | -- | **6.2** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,200** | **4,600** |



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ARCADIS Design & Consultancy for natural and built assets

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| 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<br>4.12 | 4.25<br>4.21 | 2.6<br>2.8 | 2.6<br>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<br>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<br>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 | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| 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<br>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 |
| | 4/11/2005 | 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<br>3.1 | -- | < 0.1 U | 0.7 | 0.13 | < 0.05 U | -- | -- | -- | -- | -- | -- | 1,600 | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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<br>1 | -- | 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<br>3.02 | 3.06<br>3.06 | 3.4<br>3.3 | 2.1<br>4.6 | < 0.1 U | < 0.1 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 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 | -- |



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| 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 | | | | | | | | | | | | | | | | | | |
| MW012A | 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 |
| | 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<br>0.02 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 71<br>87 | -- |
| | 3/3/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 64 | -- |
| | 5/21/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 54 | -- |
| | 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 | -- | -- | -- | -- | -- | -- | 53 | -- |
| | 6/10/2003 | FD | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 57 | -- |
| | 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 | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 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 | -- | -- | -- | -- | -- | -- | 60 | -- |
| | 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 | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 63 | 560 |
| | 1/18/2005 | N | -- | 0.02 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 80 | 580 |
| | 2/10/2005 | N | -- | 0.02 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | 0.01 | -- | -- | -- | -- | -- | -- | 70 | 520 |
| | 3/10/2005 | N | -- | 0.02 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 70 | 530 |
| | 4/13/2005 | N | -- | 0.02 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | 1.61 | < 0.01 U | 0.03 | -- | -- | -- | -- | -- | -- | 70 | 540 |
| | 5/17/2005 | N | -- | 0.01 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 70 | 530 |
| | 6/14/2005 | N | -- | 0.01 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 90 | 530 |
| | 7/12/2005 | N | -- | 0.01 | < 0.01 U | < 0.01 U | < 0.005 U | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 80 | 550 |
| | 2/10/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.039 | 0.039 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 72.6 | 533 |
| | 7/20/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.0638 | 0.0638 | < 1 U | < 1 U | < 1 U | < 3 U | 0.16 | < 0.05 U | 88.1 | 549 |
| | 4/2/2007 | N | -- | < 0.02 U | -- | -- | -- | -- | -- | < 0.2 U | 0.081 | 0.081 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 4/5/2007 | N | -- | -- | -- | < 0.015 U | -- | < 0.02 U | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 3 U | 0.1 | < 0.05 U | 99 | -- |
| | 4/21/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.0174 | 0.0174 | < 1 U | < 1 U | < 1 U | < 3 U | 0.18 | < 0.05 U | 81.8 | 517 |
| | 4/1/2009 | N | -- | 0.02 | -- | < 0.015 U | -- | < 0.02 U | -- | 0.2 | 0.005 | 0.005 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | 100 | 509 |
| | 3/11/2010 | N | -- | < 0.05 U | -- | < 0.050 U | -- | < 0.01 U | -- | 0.253 | < 0.05 U | < 0.05 U | < 1 U | < 1 U | < 1 U | < 1 U | 0.071 | < 0.05 U | 65.1 | 496 |
| | 5/22/2012 | N | < 0.0100 U | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.0674 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 97.4 | 576 |
| | 5/21/2013 | N | 0.0117 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.00514 J | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 88.5 | 503 |
| | 5/28/2014 | N | 0.0193 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 | -- | -- | 90.8 | 562 |

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| Location ID | Sample Date | Sample Type | Chemical Name / Units / NMWQCC Standard | Dissolved Arsenic mg/l 0.1 | Total Arsenic mg/l 0.1 | Dissolved Chromium mg/l 0.05 | Total Chromium mg/l 0.05 | Dissolved Chromium VI mg/l 0.05 | Total Chromium VI mg/l 0.05 | Dissolved Iron mg/l 1 | Total Iron mg/l 1 | Dissolved Manganese mg/l 0.2 | Total Manganese mg/l 0.2 | Benzene ug/l 5 | Toluene ug/l 1,000 | Ethylbenzene ug/l 700 | Total Xylenes ug/l 620 | DRO mg/l | GRO mg/l | Chloride mg/l 250 | TDS mg/l 1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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** |
| | 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**<br>**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** | -- |
| MW012M | 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**<br>**0.26** | -- | **0.3**<br>**0.2** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **1,700** | **4,810** |
| | 8/27/2001 | N | | -- | -- | **0.23**<br>**0.24** | **0.22**<br>**0.22** | **< 0.5 U**<br>**0.6** | < 0.5 U<br>< 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** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **970** | -- |
| | 3/18/2003 | N | | -- | -- | -- | -- | **0.42** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **980** | -- |
| | 6/3/2003 | N | | -- | -- | -- | -- | **1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **960** | -- |
| | 1/19/2004 | N | | -- | -- | **0.21** | -- | **0.19** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **790** | -- |
| | 6/30/2004 | N | | -- | -- | **1.04** | -- | **0.69** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **980** | -- |
| | 1/10/2005 | N | | -- | -- | **0.97** | -- | **1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **400** | -- |
| | 6/3/2005 | N | | -- | -- | **0.8** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **890** | -- |
| | 1/26/2006 | N | | -- | < 0.02 U | -- | **0.733** | -- | **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 | **935** | **3,730** |
| | 7/5/2006 | N | | -- | < 0.02 U | -- | **0.638** | -- | **0.61** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **946** | **3,720** |
| | 4/18/2007 | N | | -- | < 0.02 U | -- | **0.741** | -- | **0.58** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **925** | -- |
| | 9/20/2007 | N | | -- | < 0.02 U | -- | **0.673** | -- | **0.62** | -- | **0.399** | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **784** | -- |
| | 4/15/2008 | N | | -- | < 0.02 U | -- | **0.197** | -- | **0.088** | -- | < 0.2 U | < 0.005 U | < 0.005 U | **1.8** | < 1 U | < 1 U | < 3 U | < 0.099 U | < 0.05 U | **616** | **1,990** |



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ARCADIS Design & Consultancy for natural and built assets

| 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** |
| | 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** | -- |
| MW013A | 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 | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **67.6** | **460** |
| | 11/4/2013 | N | **0.0199 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | **2.75** | **2.14** | **1.09** | **9.1** | -- | -- | **59.6** | **512** |
| | 11/4/2013 | FD | **0.0201** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | **1.47** | **1.77 J** | **1.01** | **8.44** | -- | -- | **63.2** | **511** |
| | 5/7/2014 | N | **0.0247** | -- | < 0.0100 UJ | -- | **0.0220 J** | -- | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **68.6** | **432** |
| | 5/7/2014 | FD | **0.021** | -- | < 0.0100 UJ | -- | < 0.0100 U | -- | < 0.200 U | -- | < 0.0200 UJ | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **66.3** | **575** |
| | 11/7/2014 | N | **0.0289** | -- | **0.00295 J** | -- | < 0.0100 U | -- | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **65.2** | **598 J** |
| | 5/26/2015 | N | **0.0178 J** | -- | **0.00299 J** | -- | < 0.0100 U | -- | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **62.1** | **440** |
| | 5/26/2015 | FD | **0.0113 J** | -- | **0.00294 J** | -- | < 0.0100 U | -- | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **62.3** | **506** |
| | 11/6/2015 | N | < 0.0200 UJ | -- | **0.00560 J** | -- | **0.00560 J** | -- | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **68.6** | **530** |
| | 5/16/2016 | N | **0.0261** | -- | **0.00524 J** | -- | **0.0069 J** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **93.5** | **609** |
| | 9/20/2016 | N | **0.0253** | -- | **0.0063 J** | -- | < 0.01 U | -- | **0.00645 J** | -- | **0.00166 J** | -- | -- | -- | -- | -- | -- | -- | **88.8** | **539** |
| | 9/20/2016 | FD | **0.0224** | -- | **0.00505 J** | -- | < 0.01 U | -- | < 0.00616 U | -- | **0.00176 J** | -- | -- | -- | -- | -- | -- | -- | **84.6** | **539** |
| | 5/11/2017 | N | **0.0195** | -- | **0.00456** | -- | **0.0032 J** | -- | **0.00385 J** | -- | **0.000398 J** | -- | -- | -- | -- | -- | -- | -- | **84.5** | **506** |
| | 5/19/1999 | N | < 0.10 U | -- | **1** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,700** | **4,400** |
| | 11/18/1999 | N | -- | -- | **0.92** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **2,000** | **4,600** |
| | 5/24/2001 | N | -- | < 0.05 U | -- | **0.78** | -- | **0.71** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **1,800** | **4,890** |
| | 8/27/2001 | N | -- | -- | **0.51**<br>**0.51** | **0.5**<br>**0.5** | **1.1**<br>**0.9** | **1**<br>**0.9** | < 0.1 U | < 0.1 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 1/30/2002 | N | -- | -- | **0.46** | -- | **0.3** | -- | < 0.1 U | **0.2** | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | **2,100** | **4,430** |



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| 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 |
| | 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 | -- |
| MW014A | 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 | -- |



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| 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** |
| | 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** |
| MW015A | 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 | < 1.00 U | < 1.00 U | -- | -- | **2,190** | **5,050** |
| | 5/16/2013 | N | **0.00913 J** | -- | **0.00502 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.00770 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,410** | **3,400** |
| | 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 | -- | -- | **205 J** | **1230 J** |
| | 11/5/2013 | FD | **0.0113 J** | -- | **0.00470 J** | -- | -- | < 0.0100 U | **0.0203 J** | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | **2.18 J** | -- | -- | **1700 J** | **4020 J** |
| | 5/6/2014 | N | < 0.0200 U | -- | **0.0113** | -- | < 0.0100 U | -- | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **3,410** | **10,500** |
| | 11/10/2014 | N | **0.00704 J** | -- | **0.0109** | -- | < 0.0100 U | -- | < 0.200 U | -- | **0.0143 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **892** | **2,550** |
| | 5/27/2015 | N | < 0.0200 U | -- | **0.00931 J** | -- | < 0.0100 U | -- | < 0.200 U | -- | **0.00968 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **996** | **2,580** |
| | 11/4/2015 | N | **0.00471 J** | -- | **0.00231 J** | -- | < 0.0100 U | -- | **0.109 J** | -- | **0.0312** | -- | -- | -- | -- | -- | -- | -- | **378** | **1,080** |
| | 5/13/2016 | N | **0.042** | -- | **0.0119** | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3,960** | **7,630** |
| | 9/20/2016 | N | **0.023** | -- | **0.0335** | -- | **0.0151** | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **4,910** | **8,270** |
| | 5/11/2017 | N | **0.0105** | -- | **0.0123** | -- | **0.0112** | -- | **0.0119 J** | -- | **0.00376** | -- | -- | -- | -- | -- | -- | -- | **3,800** | **6,250** |
| | 9/22/2017 | N | **0.00763** | -- | **0.00192 J** | -- | **0.0024 J** | -- | **0.152** | -- | **0.00417** | -- | -- | -- | -- | -- | -- | -- | **361** | **1,940** |
| | 4/2/2018 | Reg | -- | **0.00351** | -- | **0.00546** | -- | < 0.0100 U | **0.24** | -- | -- | **0.0428** | -- | -- | -- | -- | -- | -- | **5,570** | **8,370** |
| | 4/2/2018 | FD | -- | **0.00222** | -- | **0.0048** | -- | < 0.0100 U | **0.214** | -- | -- | **0.0573** | -- | -- | -- | -- | -- | -- | **5,430** | **8,500** |
| | 9/13/2018 | Reg | **0.00882 J** | -- | **0.00534 J** | -- | < 0.0100 U | -- | -- | **0.164 J** | **0.0197** | -- | -- | -- | -- | -- | -- | -- | **5,950** | **9,850** |
| | 1/7/1997 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **210** | **950** |
| | 11/7/1997 | N | < 0.10 U | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 5/17/2001 | N | -- | < 0.05 U | -- | < 0.05 U | -- | **0.006** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **230** | **900** |
| | 1/22/2002 | N | -- | -- | -- | < 0.05 U | -- | < 0.005 U | -- | < 1 U | < 0.5 U | < 0.5 U | -- | -- | -- | -- | -- | -- | **240** | **1,040** |
| | 9/4/2002 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **130** | -- |
| | 12/12/2002 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **230** | -- |
| | 3/4/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **240** | -- |
| | 5/21/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **300** | -- |



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ARCADIS Design & Consultancy for natural and built assets

| | | 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 | -- |
| MW018 | 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<br>< 0.05 U | -- | < 0.005 U<br>< 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 | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 288 | **1,380** |
| | 6/29/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | **3** | **3.2** | < 3 U | **0.15** | < 0.05 U | 318 | **1,460** |
| | 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 | **0.1** | < 0.05 U | 283 | -- |
| | 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 | 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 | < 0.098 U | < 0.05 U | 223 | **1,240** |
| | 3/19/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | **2.6** | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | 181 | **1,390** |
| | 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 | **0.15** | < 0.05 U | 200 | -- |
| | 3/10/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | < 0.03 U | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.103** | < 0.05 U | 183 | **1,290** |
| | 8/10/2010 | N | -- | < 0.01 U | -- | < 0.05 U | -- | **0.02** | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.102** | < 0.05 U | 249 | **1,300** |
| | 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 | -- | -- | 221 | **1,430** |
| | 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 | -- | -- | 260 | **1,180** |
| | 5/13/2013 | N | **0.0127 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 | -- | -- | 268 | **1,310** |
| | 11/5/2013 | N | < 0.0200 U | -- | **0.00495 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | **3.27** | -- | -- | 1620 | **3,960** |
| | 5/9/2014 | N | **0.0150 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 | -- | -- | 220 | **1,220** |
| | 11/4/2014 | N | < 0.0200 U | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.200 UJ | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 149 | **1,080** |
| | 5/7/2015 | N | **0.0194 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 | **1,080** |
| | 11/3/2015 | N | **0.0132 J** | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | 143 | **979** |

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| | | 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** |
| | 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** | -- |
| MW018A | 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** |
| | 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** | -- |
| MW019A | 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 | **398** | **1,180** |
| | 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 | < 0.097 U | < 0.05 U | **394** | **1,220** |
| | 3/17/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | **11** | **3.9** | **1.5** | < 3 U | < 0.096 U | < 0.05 U | **321** | **1,150** |
| | 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 | **491** | -- |
| | 3/16/2010 | N | -- | < 0.05 U | -- | < 0.050 U | -- | < 0.01 U | -- | < 0.05 U | < 0.010 U | < 0.010 U | < 1 U | < 1 U | < 1 U | < 1 U | < 0.050 U | < 0.05 U | **231** | **1,460** |
| | 8/16/2010 | N | -- | **0.022** | -- | < 0.050 U | -- | < 0.01 U | -- | < 0.10 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | < 0.050 U | < 0.05 U | **257** | **1,190** |
| | 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 | -- | -- | **354** | **1,190** |
| | 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 | -- | -- | **335** | **1,170** |
| | 5/13/2013 | N | **0.0137 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** | **1,070** |
| | 11/5/2013 | N | **0.0156 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 | -- | -- | **295** | **1,240** |
| | 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 | -- | -- | **281** | **1,230** |
| | 11/4/2014 | N | < 0.0200 U | -- | **0.000878 J** | -- | < 0.0100 U | -- | < 0.200 UJ | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **222** | **1,020** |
| | 5/7/2015 | N | **0.0134 J** | -- | **0.00133 J** | -- | < 0.0100 U | -- | < 0.200 U | -- | **0.00444 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **246** | **918** |
| | 11/3/2015 | N | < 0.0200 U | -- | < 0.0100 U | -- | < 0.0100 U | -- | **0.0235 J** | -- | **0.0198 J** | -- | -- | -- | -- | -- | -- | -- | **9.29** | **151** |
| | 5/13/2016 | N | **0.0251** | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **314** | **887** |
| | 9/20/2016 | N | **0.00699 J** | -- | **0.00216 J** | -- | < 0.01 U | -- | **0.00799 J** | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **325** | **1,320** |
| | 5/10/2017 | N | **0.0106** | -- | **0.00182 J** | -- | < 0.01 U | -- | **0.0154 J** | -- | **0.00169 J** | -- | -- | -- | -- | -- | -- | -- | **327** | **1,300** |

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ARCADIS Design & Consultancy for natural and built assets

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| 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 | -- | -- | **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 | -- | -- | **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 | -- | -- | **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 | -- | -- | **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 | -- | -- | **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 | -- | -- | **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** | **0.0068** | **0.0068** | < 1 U | < 1 U | < 1 U | < 3 U | **0.12** | < 0.05 U | **862** | -- |
| | 9/18/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | **0.024** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.1** | < 0.05 U | **708** | -- |
| | 3/26/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **0.347** | **0.0058** | **0.0058** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **789** | **1,570** |
| | 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 | < 0.098 U | < 0.05 U | **867** | **1,950** |
| | 3/19/2009 | N | -- | < 0.02 U | -- | **0.0173** | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | **5.6** | **2.2** | < 1 U | < 3 U | **0.15** | < 0.05 U | **1,060** | **2,600** |
| | 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 | **1,110** | -- |
| | 3/12/2010 | N | -- | < 0.05 U | -- | < 0.050 U | -- | **0.019** | -- | **0.085** | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.091** | < 0.05 U | **834** | **2,550** |
| | 8/10/2010 | N | -- | **0.014** | -- | < 0.050 U | -- | **0.025** | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.106** | < 0.05 U | **947** | **2,580** |
| | 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 | -- | -- | **402 J** | **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 | -- | -- | **1,040** | **2,470** |
| | 5/13/2013 | N | **0.0109 J** | -- | **0.00787 J** | -- | -- | < 0.0100 U | **0.0337 J** | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **958** | **2,320** |
| | 11/4/2013 | N | < 0.0200 U | -- | **0.00735 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | **2.11** | -- | -- | **960** | **3,090** |
| | 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 | -- | -- | **951** | **3,140** |
| | 11/4/2014 | N | < 0.0200 U | -- | **0.0173** | -- | -- | **0.00960 J** | < 0.200 UJ | -- | **0.0150 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **441** | **1,680** |
| | 5/7/2015 | N | **0.0137 J** | -- | **0.00825 J** | -- | -- | **0.00650 J** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **953** | **2,850** |
| | 11/3/2015 | N | **0.00913 J** | -- | **0.00551 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **462** | **1,570** |
| | 5/16/2016 | N | **0.0308** | -- | < 0.00136 U | -- | **0.0065 J** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,310** | **2,720** |
| | 9/20/2016 | N | < 0.00336 U | -- | **0.0103** | -- | < 0.01 U | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **1,030** | **2,800** |
| | 5/11/2017 | N | **0.00893** | -- | **0.00723** | -- | **0.0029 J** | -- | **0.00408 J** | -- | **0.000342 J** | -- | -- | -- | -- | -- | -- | -- | **1,070** | **2,410** |



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| 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<br>< 5 U | < 1 U<br>< 5 U | < 1 U<br>< 5 U | < 1 U<br>< 5 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 | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **3000 J** | **7,000** |
| | 11/8/2012 | N | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.200 U | **0.705** | **0.705** | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **74.8** | **1,040** |
| | 11/1/2013 | N | **0.0107 J** | -- | **0.00442 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **2,760** | **6,560** |
| | 5/16/2014 | N | **0.0195 J** | -- | **0.0115** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.0122 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **740** | **9,270** |
| | 11/13/2014 | N | **0.0139 J** | -- | **0.00655 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **2,280** | **5,570** |
| | 5/11/2015 | N | < 0.0200 U | -- | **0.00279 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **2,580** | **5,690** |
| | 11/12/2015 | N | < 0.0200 U | -- | **0.00249 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **2,570** | **5,550** |
| | 5/19/2016 | N | **0.0259** | -- | **0.01 J** | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **2,130** | **5,670** |
| | 9/20/2016 | N | **0.0217** | -- | **0.0349** | -- | < 0.01 U | -- | **0.0456 J** | -- | **0.0179 J** | -- | -- | -- | -- | -- | -- | -- | **2,520** | **6,220** |
| | 5/10/2017 | N | **0.00938** | -- | **0.00422** | -- | < 0.01 U | -- | **0.0123 J** | -- | **0.0724** | -- | -- | -- | -- | -- | -- | -- | **2,530** | **5,210** |
| | 9/22/2017 | N | **0.0117** | -- | **0.00429** | -- | < 0.01 U | -- | < 0.1 U | -- | **0.0106** | -- | -- | -- | -- | -- | -- | -- | **2,210** | **5,830** |
| | 4/3/2018 | Reg | -- | **0.0106** | -- | **0.00392 J** | -- | < 0.0100 U | < 0.100 U | -- | -- | **0.0159 J** | -- | -- | -- | -- | -- | -- | **2,640** | **4,240** |
| | 9/12/2018 | REG | **0.0106** | -- | **0.00352 J** | -- | < 0.0100 U | -- | -- | < 0.100 U | **0.0108** | -- | -- | -- | -- | -- | -- | -- | **2,330** | **5,170** |
| | 1/18/1999 | N | < 0.10 U | -- | **0.13** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 1/21/1999 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **350** | **1,200** |
| | 5/23/2001 | N | -- | < 0.05 U | -- | < 0.05 U | -- | **0.027** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **930** | **2,200** |
| | 1/24/2002 | N | -- | -- | < 0.05 U | -- | **0.03** | -- | **3.3** | **4.1** | **0.13** | **0.17** | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **490** | **1,590** |
| | 9/5/2002 | N | -- | -- | < 0.05 U | -- | **0.053** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **400** | -- |
| | 12/16/2002 | N | -- | -- | -- | -- | **0.03** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **530** | -- |

ARCADIS Design & Consultancy for natural and built assets

| | | 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 |
| | 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<br>2.55 | -- | < 0.005 U<br>0.015 | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | 1,100 | 4,390 |
| | 5/29/2001 | FD | -- | < 0.05 U | -- | 2.73 | -- | < 0.005 U | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | 1,100 | 4,420 |
| | 8/30/2001 | N | -- | -- | 2.5<br>2.39 | 2.29<br>2.3 | 1.5<br>1.8 | 2.5<br>2 | < 0.1 U | < 0.1 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/27/2001 | N | -- | -- | 2.52 | -- | 1.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 2/7/2002 | N | -- | -- | 2.96 | -- | 1.9 | -- | < 0.1 U | < 0.1 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | 1,300 | 4,300 |
| | 9/17/2002 | FD | -- | -- | 0.43 | -- | 0.21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 690 | -- |
| | 9/18/2002 | N | -- | -- | 2.41 | -- | 1.3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,150 | -- |
| | 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 | -- |
| MW023 | 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 | -- | 0.000372 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 |



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ARCADIS Design & Consultancy for natural and built assets

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| 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 | **590** | **2,180** |
| | 8/13/2008 | N | -- | < 0.02 U | -- | **0.0547** | -- | **0.026** | -- | < 0.2 U | **0.0114** | **0.0114** | **3.6** | **4.3** | **9.9** | < 3 U | **0.13** | < 0.05 U | **653** | **1,780** |
| | 3/25/2009 | N | -- | < 0.02 U | -- | **0.0462** | -- | **0.041** | -- | < 0.2 U | **0.007** | **0.007** | < 1 U | < 1 U | < 1 U | < 3 U | **0.11** | < 0.05 U | **717** | **1,800** |
| | 8/19/2009 | N | -- | < 0.02 U | -- | **0.0454** | -- | **0.037** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.18** | < 0.05 U | **719** | -- |
| | 3/3/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | **0.035** | -- | **0.091** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.17** | < 0.05 U | **456** | **1,870** |
| | 8/6/2010 | N | -- | **0.013** | -- | < 0.05 U | -- | **0.061** | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.242** | < 0.05 U | **590** | **1,800** |
| | 5/22/2012 | N | < 0.0100 U | -- | **0.0479** | -- | -- | **0.048** | < 0.200 U | -- | **0.108** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **634** | **2,580** |
| | 11/1/2012 | N | -- | < 0.0100 U | -- | **0.0509** | -- | **0.0508** | -- | < 0.200 U | **0.0343** | **0.0343** | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **646** | **1,810** |
| | 5/14/2013 | N | < 0.0200 U | -- | **0.0633** | -- | -- | **0.0517** | < 0.200 U | -- | **0.00329 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **674** | **1,940** |
| | 10/30/2013 | N | **0.0133 J** | -- | **0.0699** | -- | -- | **0.0658** | < 0.200 U | -- | **0.0255** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **631** | **2,730** |
| | 5/8/2014 | N | **0.00859 J** | -- | **0.0843** | -- | -- | **0.0842** | < 0.200 U | -- | **0.00454 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **736** | **2480 J** |
| | 11/6/2014 | N | **0.00744 J** | -- | **0.123** | -- | -- | **0.105** | < 0.200 UJ | -- | **0.0132 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **625** | **2,530** |
| | 5/28/2015 | N | **0.00727 J** | -- | **0.114** | -- | -- | **0.112** | < 0.200 U | -- | **0.00625 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **703** | **2,450** |
| | 11/5/2015 | N | < 0.0200 UJ | -- | **0.143** | -- | -- | **0.124** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | < 1.40 U | **734** | **2,260** |
| | 5/16/2016 | N | **0.0341** | -- | **0.136** | -- | **0.138** | -- | -- | -- | -- | -- | < 0.408 U | < 1 U | < 0.657 U | < 0.642 U | < 0.987 U | < 0.987 U | **972** | **1,790** |
| | 9/21/2016 | N | < 0.00336 U | -- | **0.184** | -- | **0.165** | -- | < 0.00616 U | -- | **0.0019 J** | -- | < 0.408 U | < 1 U | < 0.657 U | < 0.642 U | -- | -- | **824** | **2,890** |
| | 5/11/2017 | N | **0.00875** | -- | **0.128** | -- | **0.13** | -- | **0.00318 J** | -- | **0.00809** | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 1.5 U | < 1.5 U | **875** | **1,720** |
| | 5/23/1999 | N | -- | -- | **0.03** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6/23/1999 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **140** | **680** |
| | 5/23/2001 | N | -- | < 0.05 U | -- | **0.09** | -- | **0.095** | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **440** | **1,250** |
| | 2/6/2002 | N | -- | -- | **0.06** | -- | **0.053** | -- | < 0.1 U | **0.4** | < 0.05 U | < 0.05 U | < 2 U | < 2 U | < 2 U | < 2 U | < 0.26 U | < 0.05 U | **320** | **1,080** |
| | 9/10/2002 | N | -- | -- | **0.17** | -- | **0.11** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **500** | -- |



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ARCADIS Design & Consultancy for natural and built assets

| 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<br>< 0.05 U | < 0.05 U<br>< 0.05 U | **0.038**<br>**0.043** | **0.037**<br>**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** |

Received by OCD: 3/25/2020 3:43:14 PM

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| | | 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 | -- | < 0.0100 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 | < 1 U | < 2 U | < 1 U | < 1 U | < 0.098 U | < 0.05 U | **363** | **1,710** |
| | 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 | -- | -- | **261 J** | **1,500** |
| | 10/30/2012 | N | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.200 U | **0.0234** | **0.0234** | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **288** | **1,610** |
| | 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 | -- | -- | **92.4** | **1,170** |
| | 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 | **2.68** | -- | -- | **250** | **1,470** |
| | 5/9/2014 | N | **0.00761 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.00682 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **275** | **1,420** |
| | 11/5/2014 | N | < 0.0200 U | -- | **0.0100 J** | -- | -- | **0.00620 J** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **386** | **1,840** |
| | 5/19/2015 | N | **0.0118 J** | -- | **0.00392 J** | -- | -- | **0.0367 J** | < 0.200 UJ | -- | **0.00444 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **343** | **1,770** |
| | 11/4/2015 | N | **0.00562 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **325** | **1,600** |
| | 11/4/2015 | FD | **0.00383 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **303** | **1,690** |
| | 5/13/2016 | N | **0.022** | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **294** | **1,330** |
| | 9/20/2016 | N | < 0.00336 U | -- | **0.00695 J** | -- | < 0.01 U | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **290** | **1,520** |
| | 5/11/2017 | N | **0.00529** | -- | **0.00238 J** | -- | < 0.01 U | -- | **0.00482 J** | -- | **0.00044 J** | -- | -- | -- | -- | -- | -- | -- | **365** | **1,680** |
| | 9/22/2017 | N | **0.00703** | -- | **0.00211 J** | -- | < 0.01 U | -- | < 0.1 U | -- | **0.000557 J** | -- | -- | -- | -- | -- | -- | -- | **351** | **1,760** |
| | 4/3/2018 | Reg | -- | **0.0063** | -- | **0.00154 J** | -- | < 0.0100 U | < 0.100 U | -- | -- | **0.00155 J** | -- | -- | -- | -- | -- | -- | **366** | **1,480** |
| | 9/13/2018 | Reg | **0.00682 J** | -- | < 0.0200 U | -- | < 0.0100 U | -- | -- | < 0.500 U | **0.00133 J** | -- | -- | -- | -- | -- | -- | -- | **355** | **1,600** |
| | 11/18/1999 | N | -- | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,200** | **2,400** |
| | 5/22/2001 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | -- | **1,400** | **3,040** |
| | 1/24/2002 | N | -- | -- | < 0.05 U | -- | -- | < 0.005 U | -- | < 0.05 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | **1,200** | **2,800** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| | | 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 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 150 | -- |
| | 6/15/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 100 | -- |
| | 12/13/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 440 | -- |
| | 5/26/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 390 | -- |
| | 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 | 411 | 1,110 |
| | 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 | < 0.096 U | < 0.05 U | 248 | 1,060 |
| | 3/28/2007 | 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 | 387 | -- |
| | 9/11/2007 | N | -- | **0.0259** | -- | < 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 | 360 | -- |
| | 3/25/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **0.261** | **0.0051** | **0.0051** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | 363 | 964 |
| | 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 | 328 | 962 |
| | 3/16/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.0072** | **0.0072** | **12** | **4.3** | **1.7** | < 3 U | < 0.094 U | < 0.05 U | 346 | 952 |
| | 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 | 180 | 986 |
| | 3/16/2010 | N | -- | < 0.05 U | -- | < 0.050 U | -- | < 0.01 U | -- | **0.058** | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | < 0.051 U | < 0.05 U | 273 | 1,350 |
| | 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 | **0.084** | < 0.05 U | 274 | 1,110 |
| | 5/24/2012 | N | **0.0152** | -- | < 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 | 614 |
| | 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 | -- | -- | 147 | 628 |
| | 5/14/2013 | N | **0.0209** | -- | **0.00363 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 127 | 696 |
| | 10/31/2013 | N | **0.0146 J** | -- | **0.00414 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.0793** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 315 | 1,080 |
| | 5/12/2014 | N | **0.0278** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.00418 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 154 | 633 |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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 | | | | | | | | | | | | | | | | | | |
| MW030P | 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** |
| | 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** | -- |
| | 3/10/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **450** | -- |
| | 5/22/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **640** | -- |
| | 1/7/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **820** | -- |
| | 6/15/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **220** | -- |
| | 12/8/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **360** | -- |
| | 5/24/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **380** | -- |
| | 1/19/2006 | N | -- | < 0.02 U | -- | **0.0405** | -- | < 0.02 U | -- | **0.354** | **0.0051** | **0.0051** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **279** | **1,010** |
| | 6/21/2006 | N | -- | < 0.02 U | -- | **0.0261** | -- | < 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 | **249** | **1,060** |
| | 4/13/2007 | N | -- | < 0.02 U | -- | **0.0195** | -- | < 0.02 U | -- | **0.517** | **0.0183** | **0.0183** | < 1 U | < 1 U | < 1 U | < 3 U | **0.19** | < 0.05 U | **246** | -- |
| | 9/7/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **0.217** | **0.0059** | **0.0059** | < 1 U | < 1 U | < 1 U | < 3 U | **0.21** | < 0.05 U | **228** | -- |
| | 4/7/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | **10** | **2.2** | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **255** | **1,180** |
| | 8/14/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.0114** | **0.0114** | **1.2** | **1.2** | **2.3** | < 3 U | < 0.1 U | < 0.05 U | **268** | **1,160** |
| | 3/30/2009 | 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 | **255** | **1,250** |
| | 8/6/2009 | 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 | **0.49** | **0.24** | **227** | **1,160** |
| | 3/3/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | **0.281** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | **1.8** | **2.3** | **0.108** | < 0.05 U | **236** | **1,260** |
| | 8/5/2010 | N | -- | **0.012** | -- | < 0.05 U | -- | < 0.01 U | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.081** | < 0.05 U | **214** | **1,100** |
| | 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 | -- | -- | **238** | **1,270** |
| | 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 | -- | -- | **231** | **1,140** |



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ARCADIS Design & Consultancy for natural and built assets

| | | 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** |
| MW034 | 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 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **412** | **1,690** |
| | 4/9/2007 | N | -- | < 0.02 U | -- | **0.0491** | -- | **0.033** | -- | **0.205** | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **343** | -- |
| | 4/1/2008 | N | -- | < 0.02 U | -- | **0.0612** | -- | **0.049** | -- | < 0.2 U | < 0.005 U | < 0.005 U | **8** | **2.2** | **1** | < 3 U | < 0.097 U | < 0.05 U | **363** | **1,380** |
| | 3/25/2009 | N | -- | < 0.02 U | -- | **0.0883** | -- | **0.078** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **414** | **1,360** |
| | 3/3/2010 | N | -- | < 0.05 U | -- | **0.091** | -- | **0.108** | -- | **0.056** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.093** | < 0.05 U | **296** | **1,510** |
| | 5/8/2012 | N | < 0.0100 U | -- | **0.092** | -- | -- | **0.0879** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **473** | **2,050** |
| | 5/16/2014 | N | **0.0174 J** | -- | **0.111** | -- | -- | **0.0881** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **533** | **2,000** |
| | 5/11/2015 | N | < 0.0200 U | -- | **0.0617** | -- | -- | **0.0609** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **637** | **2,150** |
| | 5/16/2016 | N | **0.0402** | -- | **0.0343** | -- | **0.0358** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **524** | **1,840** |
| | 5/5/2017 | N | **0.00624** | -- | **0.0185** | -- | **0.0126** | -- | **0.0438** | -- | < 0.002 U | -- | -- | -- | -- | -- | -- | -- | **431** | **1,630** |
| MW035 | 8/30/2001 | N | -- | -- | < 0.05 U | -- | -- | **0.024** | < 0.1 U | **0.2** | -- | -- | -- | -- | -- | -- | -- | -- | **85** | **620** |
| | 1/29/2002 | N | -- | -- | < 0.05 U | -- | **0.008** | -- | < 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 | **300** | **1,230** |
| | 9/11/2002 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | **0.25** | < 0.05 U | **80** | -- |
| | 9/12/2002 | N | -- | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/19/2002 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **28** | -- |
| | 3/5/2003 | N | -- | -- | -- | -- | **0.009** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **100** | -- |
| | 5/27/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **150** | -- |
| | 1/20/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **90** | -- |
| | 6/22/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **20** | -- |
| | 12/21/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **70** | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| Location ID | Sample Date | Sample Type | 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 |
| MW035 | 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 | 20 | 5.3 | 5.7 | 585 | 2,130 |
| | 4/19/2007 | N | | -- | 0.058 | -- | < 0.015 U | -- | 0.02 | -- | 8.49 | 0.984 | 0.984 | 2400 | < 5 U | 250 | 33 | 3.9 | 6.5 | 669 | -- |
| | 4/16/2008 | N | | -- | 0.0794 | -- | < 0.015 U | -- | < 0.08 U | -- | 10.1 | 1.27 | 1.27 | 1800 | < 5 U | 100 | 22 | 6.9 | 4.6 | 1,020 | 2,950 |
| | 4/7/2009 | N | | -- | 0.0732 | -- | < 0.015 U | -- | < 0.02 U | -- | 13.6 | 1.17 | 1.17 | 73 | < 1 U | 40 | 4 | 2.7 | 0.5 | 1,810 | 3,840 |
| | 3/16/2010 | N | | -- | < 0.05 U | -- | < 0.050 U | -- | < 0.01 U | -- | 0.14 | 0.121 | 0.121 | 2944 | < 10 U | 552.9 | 35 | 2.14 | 5.21 | 370 | 2,130 |
| | 5/25/2012 | N | | < 0.0100 U | -- | < 0.0100 U | -- | -- | < 0.0100 U | 0.667 | -- | 0.0897 | -- | 105 | < 2.00 U | 8.95 | 3.08 | -- | -- | 1,220 | 2,700 |
| | 5/15/2013 | N | | 0.0228 | -- | < 0.0100 U | -- | -- | 0.011 | 0.65 | -- | 0.0291 | -- | 6620 | < 100 U | 534 | 134 | -- | -- | 343 | 1,540 |
| | 5/23/2014 | N | | 0.0225 | -- | < 0.0100 U | -- | -- | < 0.0500 U | < 0.200 U | -- | 0.108 | -- | 996 | < 10.0 U | 113 | < 5.00 U | -- | -- | 679 | 2,120 |
| | 5/28/2015 | N | | 0.0208 | -- | 0.000821 J | -- | -- | 0.00580 J | < 0.200 U | -- | 0.0406 | -- | 1220 | < 10.0 U | 160 | < 5.00 U | -- | -- | 385 | 1,520 |
| | 5/9/2017 | N | | 0.0604 | -- | 0.00211 J | -- | 0.0025 J | -- | 15.1 | -- | 0.617 | -- | 57.2 | < 2 U | 42.2 | < 2 U | 1.36 J | 1.76 | 647 | 1,510 |
| | 9/26/2017 | N | | 0.0526 | -- | 0.00311 J | -- | < 0.01 U | -- | 8.7 J | -- | 0.178 | -- | 252 | 2.71 | 173 | < 2 U | 1.51 | < 1.5 U | 513 | 1,470 |
| | 4/4/2018 | Reg | | -- | 0.0433 | -- | 0.00105 J | -- | < 0.0100 U | 8.01 | -- | -- | 0.0823 | 22.5 | 22.5 | 9.74 | < 2 U | 0.944 J | < 1.50 U | 516 | 1,770 |
| | 4/4/2018 | FD | | -- | 0.0413 | -- | 0.00107 J | -- | < 0.0100 U | 7.74 | -- | -- | 0.0796 | 25.4 | 25.4 | 11.6 | < 2 U | 0.961 J | < 1.50 U | 432 | 1,400 |
| | 9/11/2018 | Reg | | 0.0502 | -- | 0.00126 J | -- | < 0.0100 U | -- | -- | 7.15 | 0.0653 | -- | 71.9 | < 2 U | 10.8 | 9.77 | -- | < 1.50 U | 549 | 1,470 |
| | 8/29/2001 | N | | -- | -- | < 0.05 U | -- | -- | 0.019 | < 0.1 U | < 0.1 U | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | 0.34 | < 0.05 U | 180 | 1,030 |
| | 2/7/2002 | N | | -- | -- | < 0.05 U | -- | < 0.005 U | -- | 0.7 | 1 | 0.25 | 0.33 | 3 | < 2 U | < 2 U | < 2 U | 0.43 | -- | 170 | 1,160 |
| | 9/19/2002 | N | | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | 88 | < 4 U | < 4 U | < 4 U | 0.62 | 0.11 | 150 | 1,070 |
| | 1/7/2003 | N | | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | 24 | < 2 U | < 2 U | < 2 U | 0.71 | 0.16 | 180 | -- |
| | 3/19/2003 | N | | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | 17 | < 2 U | < 2 U | < 2 U | 0.62 | 0.07 | 180 | -- |

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| 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 | -- | < 0.05 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 | -- |
| | 1/19/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 6/16/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 6/16/2004 | FD | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 12/15/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 60 | -- |
| | 12/15/2004 | FD | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 60 | -- |
| | 5/24/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 1/20/2006 | N | -- | 0.0234 | -- | < 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 | 53.9 | 491 |
| | 6/28/2006 | N | -- | 0.0203 | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | 2.1 | 2.6 | < 3 U | < 0.095 U | < 0.05 U | 52.8 | 486 |
| | 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 | < 0.095 U | < 0.05 U | 63.1 | -- |
| | 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 | < 0.095 U | < 0.05 U | 54 | -- |
| | 3/24/2008 | N | -- | 0.0223 | -- | < 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 | 58.8 | 509 |
| | 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 | 55.3 | 510 |
| | 3/17/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | 6.8 | 2.5 | 1.1 | < 3 U | < 0.098 U | < 0.05 U | 54.1 | 506 |
| | 8/21/2009 | N | -- | 0.0304 | -- | < 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 | 54.1 | -- |
| | 3/10/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | 0.898 | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | < 0.05 U | < 0.05 U | 40.5 | 364 |
| | 8/11/2010 | 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 | < 0.052 U | < 0.05 U | 34.3 | 558 |
| | 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 | -- | -- | 57.6 J | 586 |
| | 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 | -- | -- | 50.3 | 510 |



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| Location ID | Sample Date | Sample Type | 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 |
| MW041A | 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** |
| | 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** | **11,900** |
| | 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 | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **3,790** | **8,740** |
| | 4/17/2007 | N | | -- | < 0.02 U | -- | **0.172** | -- | **0.16** | -- | < 0.2 U | **0.0135** | **0.0135** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **4,010** | -- |
| | 4/2/2008 | N | | -- | < 0.02 U | -- | **0.268** | -- | **0.26** | -- | < 0.2 U | **0.0094** | **0.0094** | **10** | **2.5** | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **3,520** | **7,040** |
| | 3/31/2009 | N | | -- | < 0.02 U | -- | **0.351** | -- | **0.31** | -- | < 0.2 U | **0.0073** | **0.0073** | < 1 U | < 1 U | < 1 U | < 3 U | **0.12** | < 0.05 U | **2,990** | **7,200** |
| | 3/8/2010 | N | | -- | < 0.05 U | -- | **0.46** | -- | **0.478** | -- | < 0.03 U | < 0.05 U | < 0.05 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.126** | < 0.05 U | **2,760** | **6,370** |
| | 5/25/2012 | N | | < 0.0100 U | -- | **0.0357** | -- | -- | **0.0329** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | **479** | **1,070** |
| | 5/22/2013 | N | | < 0.0200 U | -- | **0.036** | -- | -- | **0.0315** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **427** | **1,270** |
| | 5/22/2014 | N | | < 0.0200 U | -- | **0.0348** | -- | -- | **0.0337** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **418** | **1,160** |
| | 6/5/2015 | N | | < 0.0200 U | -- | **0.00288 J** | -- | -- | < 0.0100 U | < 0.200 UJ | -- | **0.00331 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **73.5** | **312** |
| | 5/9/2017 | N | | **0.00693 J** | -- | **0.391** | -- | **0.381** | -- | **0.0624 J** | -- | **0.0279** | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 1.5 U | < 1.5 U | **2,470** | **5,270** |
| | 4/25/2002 | N | | -- | -- | < 0.05 U | -- | **0.013** | -- | < 0.1 U | **0.5** | **0.05** | < 0.05 U | < 2 U | < 2 U | < 2 U | < 2 U | < 0.26 U | < 0.05 U | **240** | **1,940** |
| | 9/11/2002 | N | | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | **0.25** | < 0.05 U | **130** | -- |
| | 9/12/2002 | N | | -- | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/19/2002 | N | | -- | -- | -- | -- | **0.6** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | **0.44** | < 0.05 U | **820** | -- |
| | 3/19/2003 | N | | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **180** | -- |
| | 5/27/2003 | N | | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.26 U | < 0.05 U | **200** | -- |
| | 1/21/2004 | N | | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | **0.07** | **100** | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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 | -- | < 0.0100 U | 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 | < 2 U | < 2 U | < 2 U | < 0.26 U | < 0.05 U | 520 | -- |
| | 1/22/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.24 U | < 0.05 U | 510 | -- |
| | 7/27/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 450 | -- |
| | 1/12/2005 | N | -- | -- | 0.31 | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 410 | -- |
| | 5/27/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | 3 | < 2 U | 4 | < 6 U | 0.32 | 0.1 | 330 | -- |
| | 1/27/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.332 | 0.332 | < 1 U | < 1 U | < 1 U | < 3 U | 1.3 | < 0.6 U | 328 | 1,490 |
| | 7/12/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.305 | 0.305 | < 1 U | < 1 U | 1.6 | 4.2 | 2.8 | 0.11 | 373 | 1,650 |
| | 7/12/2006 | FD | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.312 | 0.312 | < 1 U | < 1 U | 1.8 | 4.6 | 2.6 | 0.11 | 371 | 1,730 |
| | 4/2/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | -- | -- | < 0.2 U | 0.333 | 0.333 | < 1 U | < 1 U | < 1 U | < 3 U | 2.8 | -- | 376 | -- |
| | 4/17/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.227 | 0.227 | < 1 U | < 1 U | < 1 U | < 3 U | 2.4 | 0.17 | 340 | -- |
| | 4/2/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.248 | 0.312 | 0.312 | 6.8 | 2.1 | 1.2 | 3 | 3.3 | 0.19 | 351 | 1,520 |
| | 3/24/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 1.83 | 0.354 | 0.354 | < 1 U | < 1 U | < 1 U | < 3 U | 3.2 | 0.16 | 256 | 1,220 |
| | 3/3/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.05 U | -- | 0.207 | 0.316 | 0.316 | 1.3 | < 2 U | 5.7 | 20.8 | 1.63 | 0.189 | 148 | 1,280 |
| | 5/23/2012 | N | < 0.0100 UJ | -- | 0.0118 | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.227 | -- | < 1.00 U | < 2.00 U | 1.1 | < 1.00 U | -- | -- | 149 | 1,210 |
| | 5/22/2013 | N | < 0.0200 U | -- | 0.0115 | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.248 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 134 | 1,190 |
| | 5/22/2014 | N | 0.00641 J | -- | 0.00701 J | -- | -- | < 0.0500 U | 0.146 J | -- | 0.289 | -- | 13.5 J | < 2.00 U | 72.2 | 47.6 | -- | -- | 168 J | 1,130 |
| | 6/5/2015 | N | < 0.0200 U | -- | 0.00774 J | -- | -- | 0.00650 J | < 0.200 UJ | -- | 0.267 | -- | 6.09 | < 2.00 U | 3.72 | 11.9 | -- | -- | 168 | 1,500 |
| | 5/20/2016 | N | 0.00523 J | -- | 0.0174 | -- | < 0.00548 U | -- | -- | -- | -- | -- | 0.95 J | < 1 U | < 0.657 U | < 0.642 U | < 0.987 U | < 0.987 U | 49.1 | 1,200 |
| | 5/9/2017 | N | < 0.01 U | -- | 0.0197 J | -- | -- | -- | 0.0201 J | -- | 0.0579 | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 1.5 U | < 1.5 U | 79.8 | 1,450 |
| | 9/26/2017 | N | 0.00229 | -- | 0.0195 | -- | -- | -- | < 0.1 U | -- | 0.0614 | -- | < 2 U | < 2 U | < 2 U | < 2 U | 0.997 J | < 1.5 U | 76.7 | 1,430 |
| | 4/5/2018 | Reg | -- | 0.00173 J | -- | 0.0126 | -- | < 0.0100 U | < 0.100 U | -- | -- | 0.0634 | < 2 U | < 2 U | < 2 U | < 2 U | < 1.50 U | < 1.50 U | 69.3 | 1,120 |
| | 4/5/2018 | Reg | -- | 0.00196 J | -- | 0.0139 | -- | < 0.0100 U | < 0.100 U | -- | -- | 0.0618 | < 2 U | < 2 U | < 2 U | < 2 U | < 1.50 U | < 1.50 U | 70.2 | 1,370 |
| | 4/5/2018 | Reg | -- | 0.00177 J | -- | 0.0142 | -- | < 0.0100 U | < 0.100 U | -- | -- | 0.0604 | < 2 U | < 2 U | < 2 U | < 2 U | < 1.50 U | < 1.50 U | 69 | 1,370 |
| | 9/11/2018 | Reg | 0.00213 J | -- | 0.0131 | -- | < 0.0100 U | -- | -- | < 0.100 U | 0.071 | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | < 1.50 U | 72.1 | 1,350 |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| | | 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 | -- | -- | 0.0028 | < 2 U | < 2 U | < 2 U | < 2 U | < 1.50 U | < 1.50 U | 704 | 2,370 |
| | 9/11/2018 | Reg | 0.0106 | -- | 1.77 | -- | 1.67 | -- | -- | < 0.100 U | 0.00129 J | -- | < 2 U | < 2 U | < 2 U | < 2 U | -- | < 1.50 U | 704 | 2,980 |
| MW047 | 4/4/2002 | N | -- | -- | 0.42 | -- | 0.27 | -- | < 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 | 440 | 2,000 |
| | 9/17/2002 | N | -- | -- | 0.5 | -- | 0.33 | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | 460 | -- |
| | 1/2/2003 | N | -- | -- | -- | -- | 0.19 | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | 580 | -- |
| | 3/17/2003 | N | -- | -- | -- | -- | 0.23 | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | 420 | -- |
| | 6/2/2003 | N | -- | -- | -- | -- | 0.211 | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.24 U | < 0.05 U | 480 | -- |
| | 1/20/2004 | N | -- | -- | 0.03 | -- | 0.061 | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.27 U | < 0.05 U | 290 | -- |
| | 6/24/2004 | N | -- | -- | 0.07 | -- | 0.045 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 230 | -- |
| | 1/5/2005 | N | -- | -- | 0.21 | -- | 0.17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 460 | -- |
| | 6/6/2005 | N | -- | -- | 0.19 | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | 510 | -- |
| | 1/25/2006 | N | -- | < 0.02 U | -- | 0.0854 | -- | 0.077 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 356 | 1,700 |
| | 7/7/2006 | N | -- | < 0.02 U | -- | 0.0573 | -- | 0.043 | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.094 U | < 0.05 U | 232 | 1,430 |
| | 4/16/2007 | N | -- | < 0.02 U | -- | -- | -- | -- | -- | < 0.2 U | < 0.005 U | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- |
| | 4/17/2007 | N | -- | -- | -- | 0.0511 | -- | 0.03 | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | 206 | -- |
| | 4/3/2008 | N | -- | < 0.02 U | -- | 0.107 | -- | 0.11 | -- | < 0.2 U | < 0.005 U | < 0.005 U | 4.1 | 1.3 | < 1 U | < 3 U | < 0.097 U | < 0.05 U | 212 | 1,190 |
| | 3/16/2010 | N | -- | < 0.05 U | -- | 0.141 | -- | 0.015 | -- | 0.039 | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | 0.145 | < 0.05 U | 340 | 2,630 |
| | 5/23/2012 | N | < 0.0100 UJ | -- | 0.145 | -- | -- | 0.142 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 620 | 2,260 |
| | 5/20/2013 | N | < 0.0200 U | -- | 0.0487 | -- | -- | 0.0433 | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 248 | 1,770 |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| | | 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** | < 2 U | < 2 U | < 0.26 U | < 0.05 U | **3,200** | **6,940** |
| | 9/16/2002 | N | -- | -- | **0.06** | -- | **0.056** | -- | -- | -- | -- | -- | < 2 U | **2** | < 2 U | < 2 U | -- | -- | **2,900** | -- |
| | 12/4/2002 | N | -- | -- | **0.07** | -- | **0.049** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | **0.63** | < 0.05 U | **3,300** | -- |
| | 3/13/2003 | N | -- | -- | -- | -- | **0.062** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3,300** | -- |
| | 5/28/2003 | N | -- | -- | -- | -- | **0.047** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.27 U | < 0.05 U | **3,200** | -- |
| | 12/17/2003 | N | -- | -- | **0.13** | -- | **0.099** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.24 U | < 0.05 U | **1,860** | -- |
| | 6/29/2004 | N | -- | -- | **0.06** | -- | **0.043** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **3,100** | -- |
| | 1/6/2005 | N | -- | -- | **0.07** | -- | **0.065** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **3,200** | -- |
| | 6/6/2005 | N | -- | -- | **0.06** | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **2,700** | -- |
| | 1/25/2006 | N | -- | < 0.02 U | -- | **0.0624** | -- | **0.06** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **2,770** | **5,860** |
| | 7/11/2006 | N | -- | < 0.02 U | -- | **0.0701** | -- | **0.061** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.17** | < 0.05 U | **2,480** | **5,790** |
| | 4/10/2007 | N | -- | < 0.02 U | -- | **0.0823** | -- | **0.078** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **2,320** | -- |
| | 4/8/2008 | N | -- | < 0.02 U | -- | **0.0953** | -- | **0.094** | -- | **0.303** | **0.0071** | **0.0071** | **2.3** | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **2,260** | **4,320** |
| | 3/26/2009 | N | -- | < 0.02 U | -- | **0.103** | -- | **0.11** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **2,210** | **2,210** |
| | 3/5/2010 | N | -- | < 0.05 U | -- | **0.11** | -- | **0.128** | -- | **0.229** | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.076** | < 0.05 U | **1,840** | **4,570** |
| | 5/17/2012 | N | < 0.0100 UJ | -- | **0.124** | -- | -- | **0.127** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1800 J** | **4,480** |
| | 5/8/2013 | N | < 0.0200 UJ | -- | **0.127** | -- | -- | **0.133** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,410** | **3,620** |
| | 5/15/2014 | N | < 0.0200 UJ | -- | **0.126** | -- | -- | **0.14** | < 0.200 U | -- | < 0.0200 UJ | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,320** | **3,360** |
| | 5/12/2015 | N | **0.0155 J** | -- | **0.15** | -- | -- | **0.151** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,390** | **3,330** |
| | 9/30/2015 | N | -- | -- | -- | **0.147** | -- | **0.157** | -- | **0.127 J** | < 0.0200 U | < 0.0200 U | -- | -- | -- | -- | -- | < 1.40 U | **1,270** | **3,240** |



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ARCADIS Design & Consultancy for natural and built assets

| | | 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 | -- | < 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** |

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| 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** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,000** | -- |
| | 6/7/2005 | N | -- | -- | **0.25** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **900** | -- |
| | 1/26/2006 | N | -- | < 0.02 U | -- | **0.262** | -- | **0.27** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **838** | **2,260** |
| | 7/11/2006 | N | -- | < 0.02 U | -- | **0.148** | -- | **0.15** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.094 U | < 0.05 U | **807** | **2,150** |
| | 4/10/2007 | N | -- | < 0.02 U | -- | **0.145** | -- | **0.14** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **868** | -- |
| | 9/20/2007 | N | -- | **0.0217** | -- | **0.138** | -- | **0.12** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **844** | -- |
| | 4/8/2008 | N | -- | < 0.02 U | -- | **0.121** | -- | **0.11** | -- | < 0.2 U | < 0.005 U | < 0.005 U | **1.3** | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | **925** | **6,010** |
| | 8/20/2008 | N | -- | < 0.02 U | -- | **0.121** | -- | **0.13** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | **1.1** | < 3 U | < 0.1 U | < 0.05 U | **985** | **2,170** |
| | 3/26/2009 | N | -- | < 0.02 U | -- | **0.111** | -- | **0.11** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **978** | **2,360** |
| | 8/10/2009 | N | -- | < 0.02 U | -- | **0.107** | -- | **0.1** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.11** | < 0.05 U | **834** | **2,350** |
| | 3/5/2010 | N | -- | < 0.05 U | -- | **0.122** | -- | **0.12** | -- | **0.091** | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.088** | < 0.05 U | **858** | **2,640** |
| | 8/9/2010 | N | -- | **0.013** | -- | **0.106** | -- | **0.143** | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.052** | < 0.05 U | **764** | **2,410** |
| | 5/16/2012 | N | < 0.0100 U | -- | **0.148** | -- | -- | **0.144** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **803 J** | **2,340** |
| | 11/7/2012 | N | -- | < 0.0100 U | -- | **0.153** | -- | **0.148** | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **814** | **2,400** |
| | 11/7/2012 | FD | -- | < 0.0100 U | -- | **0.154** | -- | **0.149** | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **816** | **1,860** |
| | 5/8/2013 | N | < 0.0200 UJ | -- | **0.143** | -- | -- | **0.145** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **752** | **2,360** |
| | 11/4/2013 | N | **0.0107 J** | -- | **0.143** | -- | -- | **0.142** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | **3.84** | -- | -- | **726** | **2,540** |
| | 5/15/2014 | N | < 0.0200 UJ | -- | **0.148** | -- | -- | **0.148** | < 0.200 U | -- | < 0.0200 UJ | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **855** | **2,330** |
| | 11/14/2014 | N | **0.0199 J** | -- | **0.149** | -- | -- | **0.141** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **773** | **2,900** |
| | 11/14/2014 | FD | **0.0170 J** | -- | **0.146** | -- | -- | **0.142** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **755** | **2,870** |



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| | | 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** |
| | 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** |
| MW055SA | 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** |
| | 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** | **3,500** |
| | 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** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/16/2003 | N | -- | -- | **0.37** | -- | **0.27** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,220** | -- |
| | 12/16/2003 | FD | -- | -- | **0.35** | -- | **0.28** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,240** | -- |
| | 7/1/2004 | N | -- | -- | **0.37** | -- | **0.21** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,310** | -- |
| | 1/11/2005 | N | -- | -- | **0.38** | -- | **0.06** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,380** | -- |
| | 6/6/2005 | N | -- | -- | **0.37** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,360** | -- |
| | 1/26/2006 | N | -- | < 0.02 U | -- | **0.432** | -- | **0.4** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **1,330** | **3,640** |
| | 7/12/2006 | N | -- | < 0.02 U | -- | **0.375** | -- | **0.42** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | **1.2** | **1.1** | < 3 U | **0.22** | < 0.05 U | **1,460** | **3,240** |
| | 4/11/2007 | N | -- | < 0.02 U | -- | **0.323** | -- | **0.28** | -- | **0.414** | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **1,320** | -- |
| | 9/21/2007 | N | -- | **0.0216** | -- | **0.445** | -- | **0.41** | -- | **0.209** | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.17** | < 0.05 U | **1,470** | -- |
| | 4/9/2008 | N | -- | < 0.02 U | -- | **0.417** | -- | **0.4** | -- | < 0.2 U | < 0.005 U | < 0.005 U | **1.6** | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **1,400** | **3,590** |
| | 8/19/2008 | N | -- | < 0.02 U | -- | **0.365** | -- | **0.35** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.1 U | < 0.05 U | **1,540** | **3,880** |
| | 3/25/2009 | N | -- | < 0.02 U | -- | **0.402** | -- | **0.41** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **1,230** | **3,930** |
| | 8/12/2009 | N | -- | **0.0254** | -- | **0.398** | -- | **0.41** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.16** | < 0.05 U | **1,330** | **4,020** |
| MW056SA | 3/4/2010 | N | -- | < 0.05 U | -- | **0.421** | -- | **0.44** | -- | **0.091** | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.102** | < 0.05 U | **1,390** | **4,100** |
| | 8/9/2010 | N | -- | **0.023** | -- | **0.357** | -- | **0.45** | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.14** | < 0.05 U | **1,280** | **3,920** |
| | 5/16/2012 | N | < 0.0100 U | -- | **0.407** | -- | -- | **0.379** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | **1390 J** | **4,060** |
| | 5/16/2012 | FD | < 0.0100 U | -- | **0.384** | -- | -- | **0.377** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1430 J** | **4,000** |
| | 11/8/2012 | N | -- | < 0.0100 U | -- | **0.416** | -- | **0.42** | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,380** | **3,770** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| Location ID | Sample Date | Sample Type | 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 |
| MW057SA | 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** | **2,270** |
| | 3/19/2003 | N | | -- | -- | -- | -- | **0.47** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 2 U | < 0.25 U | < 0.05 U | **930** | -- |
| | 6/3/2003 | N | | -- | -- | -- | -- | **0.698** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,070** | -- |
| | 1/13/2004 | N | | -- | -- | < 0.05 U | -- | **0.009** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **200** | -- |
| | 6/22/2004 | N | | -- | -- | **0.01** | -- | **0.009** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **150** | -- |
| | 1/3/2005 | N | | -- | -- | **0.41** | -- | **0.17** | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **580** | -- |
| | 6/8/2005 | N | | -- | -- | **0.43** | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **590** | -- |
| | 1/24/2006 | N | | -- | < 0.02 U | -- | **0.581** | -- | **0.54** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **610** | **2,500** |
| | 7/6/2006 | N | | -- | < 0.02 U | -- | **0.599** | -- | **0.57** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **639** | **2,100** |
| | 9/14/2007 | N | | -- | < 0.02 U | -- | **0.835** | -- | **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 | **694** | -- |
| | 4/15/2008 | N | | -- | < 0.02 U | -- | **1.7** | -- | **1.7** | -- | **0.338** | < 0.005 U | < 0.005 U | **2.3** | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **1,040** | **3,660** |
| | 8/21/2008 | N | | -- | < 0.02 U | -- | **2.26** | -- | **2.2** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **1,140** | **4,490** |
| | 4/2/2009 | N | | -- | < 0.02 U | -- | **2** | -- | **1.9** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | **1.6** | < 3 U | < 0.094 U | < 0.05 U | **876** | **3,680** |
| | 8/19/2009 | N | | -- | < 0.02 U | -- | **2.22** | -- | **1.1** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.1 U | < 0.05 U | **1,050** | -- |
| | 3/8/2010 | N | | -- | < 0.05 U | -- | **1.75** | -- | **1.65** | -- | < 0.03 U | < 0.05 U | < 0.05 U | < 1 U | < 1 U | < 1 U | < 1 U | **0.07** | < 0.05 U | **667** | **2,580** |
| | 8/6/2010 | N | | -- | < 0.01 U | -- | **2** | -- | **2.91** | -- | < 0.10 U | < 0.05 U | < 0.05 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.071** | < 0.05 U | **963** | **4,130** |
| | 5/24/2012 | N | | < 0.0100 U | -- | **0.0175** | -- | -- | **0.0149** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **219** | **911** |
| | 5/24/2012 | FD | | < 0.0100 U | -- | **0.0164** | -- | -- | **0.0132** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **221** | **885** |
| | 11/6/2012 | N | | -- | < 0.0100 U | -- | **2.7** | -- | **2.76** | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **992** | **4,160** |
| | 11/6/2012 | FD | | -- | < 0.0100 U | -- | **2.78** | -- | **2.8** | -- | **0.287** | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,020** | **4,140** |
| | 5/14/2013 | N | | **0.0111 J** | -- | **2.58** | -- | -- | **2.52** | **0.0612 J** | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **967** | **3,790** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| Location ID | Sample Date | Sample Type | 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 |
| | 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 | 2,010 |
| | 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 | < 0.6 U | 961 | 3,510 |
| | 1/24/2006 | FD | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.0538 | 0.0538 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 950 | 3,370 |
| | 7/6/2006 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.354 | 0.354 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | 842 | 3,280 |
| | 3/28/2007 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.286 | 0.423 | 0.423 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.005 U | 876 | -- |
| | 9/14/2007 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.399 | 0.635 | 0.635 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | 983 | -- |
| | 3/25/2008 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.357 | 0.734 | 0.734 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.097 U | < 0.05 U | 1,030 | 3,430 |
| | 8/11/2008 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.361 | 0.914 | 0.914 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.099 U | < 0.05 U | 1,130 | 3,680 |
| | 3/18/2009 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.451 | 0.956 | 0.956 | 5.2 | 2.1 | 1 | < 3 U | < 0.098 U | < 0.05 U | 1,160 | 3,420 |
| | 8/24/2009 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 1.11 | 1.11 | < 1 U | < 1 U | < 1 U | < 3 U | 0.11 | < 0.05 U | 1,450 | 3,450 |
| | 3/10/2010 | N | | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | 0.249 | 1.42 | 1.42 | < 1 U | < 1 U | < 1 U | < 1 U | 0.06 | < 0.05 U | 994 | 3,860 |
| | 8/13/2010 | N | | -- | 0.011 | -- | < 0.05 U | -- | < 0.01 U | -- | < 0.1 U | 1.42 | 1.42 | < 1 U | < 2 U | < 1 U | < 1 U | < 0.050 U | < 0.05 U | 1,090 | 4,560 |
| | 5/24/2012 | N | | < 0.0100 U | -- | < 0.0100 U | -- | -- | < 0.0100 U | 0.717 | -- | 0.905 | -- | 3.59 | < 2.00 U | 3.71 | < 1.00 U | -- | -- | 758 | 2,750 |
| | 10/31/2012 | N | | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.0100 U | -- | 3.02 | 1.27 | 1.27 | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,030 | 3,210 |
| | 5/15/2013 | N | | 0.00865 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | 0.275 | -- | 2.1 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,140 | 4,310 |
| | 10/31/2013 | N | | 0.0110 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | 1.07 | -- | 1.07 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 984 | 4,040 |
| | 5/12/2014 | N | | 0.0184 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | 0.802 | -- | 0.935 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,440 | 2,760 |
| | 11/6/2014 | N | | 0.0181 J | -- | 0.00379 J | -- | -- | < 0.0100 U | < 0.200 UJ | -- | 5.2 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,270 | 4,520 |
| | 5/21/2015 | N | | < 0.0200 U | -- | 0.00131 J | -- | -- | < 0.0100 U | < 0.200 U | -- | 2.6 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,300 | 4,980 |
| | 11/5/2015 | N | | < 0.0200 UJ | -- | 0.00727 J | -- | -- | < 0.0100 U | 0.0549 J | -- | 1.1 | -- | -- | -- | -- | -- | -- | -- | 696 | 2,460 |



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ARCADIS Design & Consultancy for natural and built assets

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| 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**<br>**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 | -- | **0.0235** | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.44** | **0.11** | **62.1** | **504** |
| | 3/2/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | **0.103** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.164** | < 0.05 U | **60.8** | **1000** |
| | 8/5/2010 | N | -- | **0.035** | -- | < 0.05 U | -- | < 0.01 U | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | **2.2** | < 1 U | < 1 U | **0.277** | < 0.05 U | **64** | **432** |
| | 5/23/2012 | N | < 0.0100 UJ | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.0277** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **59.2** | **569** |
| | 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 | -- | -- | **64.9** | **516** |
| | 5/14/2013 | N | **0.0227** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **60.4** | **502** |
| | 10/30/2013 | N | **0.0185 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.0617** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **56.2** | **478** |
| | 5/13/2014 | N | **0.0179 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 | -- | -- | **70.2** | **604** |
| | 11/10/2014 | N | **0.0253** | -- | **0.000903 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **60.3** | **476** |
| | 5/28/2015 | N | **0.0208** | -- | **0.000870 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.00401 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **60.3** | **490** |
| | 11/10/2015 | N | **0.0274** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **63.2** | **517** |
| | 5/16/2016 | N | **0.0274** | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **63.8** | **317** |
| | 9/21/2016 | N | **0.019** | -- | **0.00327 J** | -- | < 0.01 U | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **61.3** | **505** |
| | 5/11/2017 | N | **0.0214** | -- | **0.00312 J** | -- | < 0.01 U | -- | **0.00369 J** | -- | **0.000214 J** | -- | -- | -- | -- | -- | -- | -- | **63** | **334** |
| | 5/11/2017 | FD | **0.0203** | -- | **0.00336 J** | -- | < 0.01 U | -- | **0.0102 J** | -- | **0.000357 J** | -- | -- | -- | -- | -- | -- | -- | **62.8** | **418** |
| | 9/21/2017 | N | **0.0254** | -- | **0.00193 J** | -- | -- | < 0.0100 U | < 0.100 U | -- | **0.000262 J** | -- | -- | -- | -- | -- | -- | -- | **59** | **482** |



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ARCADIS Design & Consultancy for natural and built assets

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| Location ID | Sample Date | Sample Type | 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 |
| | 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 | -- | < 0.01 U | **0.17** | **0.17** | **0.2** | -- | < 0.4 U | < 0.4 U | < 0.01 U | **1.75** | -- | -- | -- | -- | -- | -- | **1,210** | **3,340** |
| | 2/2/2005 | N | -- | < 0.01 U | **0.21** | **0.13** | **0.055** | -- | < 0.4 U | **2.11** | < 0.01 U | **0.08** | -- | -- | -- | -- | -- | -- | **1,120** | **3,220** |
| | 3/1/2005 | N | -- | < 0.01 U | **0.11** | **0.07** | **0.15** | -- | < 0.4 U | **0.9** | < 0.01 U | **0.03** | -- | -- | -- | -- | -- | -- | **1,240** | **3,160** |
| | 3/24/2005 | N | -- | < 0.01 U | **0.1** | **0.06** | **0.041** | -- | < 0.4 U | **1.68** | < 0.01 U | **0.04** | -- | -- | -- | -- | -- | -- | **1,110** | **3,230** |
| | 4/27/2005 | N | -- | < 0.01 U | **0.18** | **0.16** | **0.2** | -- | < 0.4 U | **1.84** | < 0.01 U | **0.07** | -- | -- | -- | -- | -- | -- | **1,120** | **3,180** |
| | 5/24/2005 | N | -- | < 0.01 U | **0.17** | **0.15** | **0.16** | -- | < 0.4 U | **1.18** | < 0.01 U | **0.04** | -- | -- | -- | -- | -- | -- | **1,140** | **3,200** |
| | 6/28/2005 | N | -- | -- | **0.13** | -- | -- | -- | < 0.4 U | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | **1,160** | -- |
| | 7/14/2005 | N | -- | < 0.1 U | **0.13** | **0.6** | **0.24** | -- | < 0.4 U | **1.75** | < 0.01 U | **0.5** | -- | -- | -- | -- | -- | -- | **1,170** | **3,240** |
| | 2/2/2006 | N | -- | < 0.02 U | -- | **0.169** | -- | **0.14** | -- | **2.82** | **0.0721** | **0.0721** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **1,150** | **3,010** |
| | 7/14/2006 | N | -- | < 0.02 U | -- | **0.128** | -- | **0.14** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.15** | < 0.05 U | **1,200** | **3,420** |
| | 3/21/2007 | N | -- | < 0.02 U | -- | **0.179** | -- | **0.16** | -- | **0.252** | **0.007** | **0.007** | < 1 U | < 1 U | < 1 U | < 3 U | **0.17** | < 0.005 U | **1,090** | -- |
| | 9/6/2007 | N | -- | < 0.02 U | -- | **0.164** | -- | **0.15** | -- | **220** | -- | -- | < 1 U | < 1 U | < 1 U | < 3 U | **0.22** | < 0.05 U | **1,130** | -- |
| | 3/25/2008 | N | -- | < 0.02 U | -- | **0.0393** | -- | **0.066** | -- | **0.307** | **0.0129** | **0.0129** | < 1 U | < 1 U | < 1 U | < 3 U | **0.56** | < 0.05 U | **1,540** | **3,600** |
| | 8/5/2008 | N | -- | < 0.02 U | -- | **0.0386** | -- | **0.073** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.73** | < 0.05 U | **1,390** | **3,890** |
| | 3/17/2009 | N | -- | < 0.02 U | -- | **0.127** | -- | **0.11** | -- | < 0.2 U | **0.0053** | **0.0053** | < 1 U | < 1 U | < 1 U | < 3 U | **0.27** | < 0.05 U | **1,190** | **3,200** |
| | 8/17/2009 | N | -- | < 0.02 U | -- | **0.097** | -- | **0.098** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.41** | < 0.05 U | **1,500** | **3,320** |
| | 3/2/2010 | N | -- | < 0.05 U | -- | **0.092** | -- | **0.109** | -- | **0.061** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.292** | < 0.05 U | **1,070** | **4,460** |
| | 8/3/2010 | N | -- | **0.02** | -- | **0.09** | -- | < 0.01 U | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.291** | < 0.05 U | **858** | **2,680** |
| | 5/11/2012 | N | < 0.0100 U | -- | **0.077** | -- | -- | **0.0745** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **689 J** | **2,600** |
| | 10/30/2012 | N | -- | < 0.0100 U | -- | **0.0808** | -- | **0.0792** | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **737** | **3,020** |



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ARCADIS Design & Consultancy for natural and built assets

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| Location ID | Sample Date | Sample Type | 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 |
| | 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 | -- | -- | -- | -- | -- | -- | -- | -- |
| MW065SA | 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** |
| | 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 | < 3 U | < 0.6 U | < 0.6 U | **1,780** | **4,150** |
| | 1/25/2006 | FD | | -- | < 0.02 U | -- | **0.177** | -- | **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 | **1,860** | **4,300** |
| | 7/11/2006 | N | | -- | < 0.02 U | -- | **0.0317** | -- | **0.021** | -- | < 0.2 U | **0.0061** | **0.0061** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **1,580** | **3,930** |
| | 9/20/2007 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **0.277** | **0.221** | **0.221** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **1,160** | -- |
| MW066SA | 8/19/2008 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.259** | **0.259** | < 1 U | < 1 U | **1.1** | < 3 U | < 0.1 U | < 0.05 U | **1,090** | **3,000** |
| | 3/26/2009 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.345** | **0.345** | < 1 U | < 1 U | **1.1** | < 3 U | < 0.097 U | < 0.05 U | **1,160** | **2,980** |
| | 8/6/2009 | N | | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.381** | **0.381** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **966** | **3,060** |
| | 3/3/2010 | N | | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | **0.12** | **0.445** | **0.445** | < 1 U | < 2 U | < 1 U | < 1 U | **0.09** | < 0.05 U | **949** | **3,080** |
| | 8/4/2010 | N | | -- | **0.015** | -- | < 0.05 U | -- | < 0.01 U | -- | < 0.1 U | **0.555** | **0.555** | **1.9** | < 2 U | < 1 U | < 1 U | **0.083** | < 0.05 U | **1,000** | **2,790** |
| | 5/15/2012 | N | | < 0.0100 UJ | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.534** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1150 J** | **3,630** |
| | 11/2/2012 | N | | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.0100 U | -- | < 0.200 U | **1.01** | **1.01** | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,190** | **3,150** |
| | 5/7/2013 | N | | **0.00811 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **1.19** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,300** | **3,230** |
| | 5/7/2013 | FD | | **0.00808 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | **0.0276 J** | -- | **1.09** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,290** | **3,470** |
| | 10/31/2013 | N | | **0.00999 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **1.13** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,290** | **3,580** |
| | 5/15/2014 | N | | < 0.0200 UJ | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **1.1** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,410** | **4,100** |
| | 11/12/2014 | N | | **0.0110 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.883** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,250** | **3,990** |
| | 5/14/2015 | N | | **0.0128 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.905** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **1,330** | **3,860** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| | | 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 | | | | | | | | | | | | | | | | | | |
| MW067SA | 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** | < 1 U | < 1 U | < 1 U | < 3 U | -- | < 0.05 U | **128** | -- |
| | 9/7/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.367** | **0.367** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.095 U | < 0.05 U | **1,250** | -- |
| | 3/25/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **1.02** | **1.02** | **1.5** | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **2,340** | **4,550** |
| | 8/11/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **1.95** | **1.95** | **3.2** | < 1 U | < 1 U | < 3 U | **0.68** | < 0.05 U | **5,690** | **17,800** |
| | 3/18/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.396** | **0.396** | **5.3** | **2.2** | **1.1** | < 3 U | **0.096** | < 0.05 U | **1,170** | **2,610** |
| | 8/24/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | **0.588** | **0.588** | < 1 U | < 1 U | < 1 U | < 3 U | **0.11** | < 0.05 U | **2,110** | **3,500** |
| | 3/9/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | **0.054** | **0.531** | **0.531** | < 1 U | < 1 U | < 1 U | < 1 U | **0.113** | < 0.05 U | **1,420** | **3,110** |
| | 8/11/2010 | N | -- | **0.022** | -- | < 0.05 U | -- | < 0.01 U | -- | < 0.1 U | **0.607** | **0.607** | < 1 U | < 2 U | < 1 U | < 1 U | **0.068** | < 0.05 U | **1,450** | **3,860** |
| | 5/25/2012 | 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 | -- | -- | **114** | **880** |
| | 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 | -- | -- | **121** | **784** |
| | 5/15/2013 | N | **0.0113 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 | -- | -- | **120** | **820** |
| | 11/6/2013 | N | **0.0166 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 | -- | -- | **111** | **899** |
| | 5/12/2014 | N | **0.0171 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 | -- | -- | **124** | **798** |
| | 11/5/2014 | N | **0.00864 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.243** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **705** | **1,840** |
| | 5/20/2015 | N | **0.0164 J** | -- | **0.000839 J** | -- | -- | < 0.0100 U | < 0.200 UJ | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **129** | **795** |
| | 11/5/2015 | N | < 0.0200 UJ | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **118** | **885** |
| | 5/13/2016 | N | **0.0921** | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **17,000** | **31,500** |
| | 9/21/2016 | N | < 0.00336 U | -- | **0.0641** | -- | < 0.01 U | -- | **0.263** | -- | **2.73** | -- | -- | -- | -- | -- | -- | -- | **11,300** | **26,700** |
| | 5/11/2017 | N | **0.0193** | -- | **0.00262 J** | -- | < 0.01 U | -- | **0.343** | -- | **3.29** | -- | -- | -- | -- | -- | -- | -- | **8,760** | **10,400** |
| | 9/22/2017 | N | **0.0163** | -- | **0.00055 J** | -- | < 0.01 U | -- | **0.298** | -- | **2.6** | -- | -- | -- | -- | -- | -- | -- | **10,100** | **18,800** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| 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 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 167 | 805 |
| | 5/8/2014 | 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 | -- | -- | 172 | 737 |
| | 11/10/2014 | N | 0.0143 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.00449 J | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 162 | 825 |
| | 6/1/2015 | N | 0.0123 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.00793 J | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 179 | 836 |
| | 11/9/2015 | N | < 0.0200 UJ | -- | 0.00391 J | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | 208 | 846 |
| | 5/16/2016 | N | 0.0212 | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 333 | 983 |
| | 9/21/2016 | N | 0.0041 J | -- | < 0.00136 U | -- | < 0.01 U | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | 287 | 979 |
| | 5/11/2017 | N | 0.0131 | -- | 0.00191 J | -- | < 0.01 U | -- | 0.00494 J | -- | 0.000213 J | -- | -- | -- | -- | -- | -- | -- | 298 | 672 |
| | 9/21/2017 | N | 0.0155 | -- | 0.000718 J | -- | -- | < 0.0100 U | < 0.100 U | -- | < 0.00200 U | -- | -- | -- | -- | -- | -- | -- | 287 | 1,040 |
| | 3/29/2018 | Reg | -- | 0.0141 | -- | < 0.00400 U | -- | < 0.0100 U | < 0.1 | -- | -- | 0.000337 J | -- | -- | -- | -- | -- | -- | 350 | 956 |
| | 3/29/2018 | FD | -- | 0.0133 | -- | < 0.00400 U | -- | < 0.0100 U | < 0.1 | -- | -- | 0.00149 J | -- | -- | -- | -- | -- | -- | 350 | 996 |
| | 9/12/2018 | REG | 0.0145 | -- | 0.000838 J | -- | < 0.0100 U | -- | -- | < 0.100 U | 0.000481 J | -- | -- | -- | -- | -- | -- | -- | 387 | 1,120 |
| | 3/6/2003 | N | -- | < 0.05 U | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | 5 | < 2 U | < 2 U | < 0.25 U | < 0.05 U | 53 | 490 |
| | 3/25/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 47 | -- |
| | 5/29/2003 | N | -- | -- | -- | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 47 | -- |
| | 1/13/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 60 | -- |
| | 6/16/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 12/15/2004 | N | -- | -- | < 0.01 U | -- | 0.005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 60 | -- |
| | 6/1/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 | -- |
| | 1/27/2006 | 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 | < 0.6 U | < 0.6 U | 61.8 | 540 |



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ARCADIS Design & Consultancy for natural and built assets

| 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** |
| | 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** |
| MW071SA | 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 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

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ARCADIS Design & Consultancy for natural and built assets

| | | 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 | -- | -- | < 0.0100 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 | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **234** | **1,020** |
| | 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 | -- | -- | **225** | **1,070** |
| | 5/16/2014 | N | **0.0135 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 | -- | -- | **295** | **1,080** |
| | 11/12/2014 | N | **0.0190 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.00434 J** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **299** | **1,140** |
| | 11/12/2014 | FD | **0.0119 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 | -- | -- | **297** | **1,140** |
| | 5/14/2015 | N | **0.0138 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 | -- | -- | **314** | **1,120** |
| | 11/11/2015 | N | **0.0169 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **268** | **995 J** |
| | 5/17/2016 | N | **0.0122** | -- | < 0.00136 U | -- | < 0.00548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **256** | **1,010** |
| | 9/19/2016 | N | < 0.00336 U | -- | < 0.00136 U | -- | < 0.01 U | -- | < 0.00616 U | -- | **0.00153 J** | -- | -- | -- | -- | -- | -- | -- | **232** | **1,070** |
| | 5/9/2017 | N | **0.0112** | -- | **0.0023 J** | -- | < 0.01 U | -- | **0.0147 J** | -- | **0.0112** | -- | -- | -- | -- | -- | -- | -- | **409** | **902** |
| | 9/20/2017 | N | **0.0128** | -- | **0.00085 J** | -- | < 0.01 U | -- | < 0.1 U | -- | **0.00351** | -- | -- | -- | -- | -- | -- | -- | **250** | **886** |
| | 3/22/2018 | Reg | -- | **0.0118** | -- | < 0.00400 U | -- | < 0.0100 U | < 0.1 | -- | -- | **0.000798** | -- | -- | -- | -- | -- | -- | **189** | **3,270** |
| | 9/12/2018 | Reg | **0.0112** | -- | < 0.00400 U | -- | < 0.0100 U | -- | -- | **0.231** | **0.00136 J** | -- | -- | -- | -- | -- | -- | -- | **229** | **965** |
| | 2/4/2004 | N | -- | < 0.05 U | < 0.05 U | < 0.05 U | < 0.005 U | -- | < 0.1 U | **0.9** | < 0.05 U | < 0.05 U | < 2 U | < 2 U | < 2 U | < 6 U | < 0.3 U | < 0.05 U | **650** | **2,550** |
| | 6/10/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **600** | -- |
| | 12/7/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | -- | < 0.05 U | **670** | -- |
| | 5/31/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **590** | -- |
| | 5/31/2005 | FD | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | **590** | -- |
| | 1/18/2006 | 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 | **623** | **2,740** |
| | 6/20/2006 | 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 | < 0.095 U | < 0.05 U | **659** | **2,910** |
| | 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 | < 0.096 U | < 0.05 U | **653** | -- |
| | 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 | < 0.096 U | < 0.05 U | **638** | -- |
| | 3/20/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | **1.8** | < 3 U | < 0.096 U | < 0.05 U | **607** | **2,560** |



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| 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 | -- | 0.0065 J | -- | < 0.1 U | -- | 0.000256 J | -- | -- | -- | -- | -- | -- | -- | 377 | 1,880 |
| | 3/22/2018 | Reg | -- | 0.0123 | -- | 0.0121 | -- | < 0.0100 U | < 0.1 | -- | -- | < 0.002 | -- | -- | -- | -- | -- | -- | 362 | 1,730 |
| | 9/11/2018 | Reg | 0.0152 | -- | 0.0135 | -- | 0.00660 J | -- | -- | < 0.100 U | 0.000321 J | -- | -- | -- | -- | -- | -- | -- | 399 | 1,670 |
| MW076SA | 2/4/2004 | N | -- | < 0.05 U | < 0.05 U | < 0.05 U | < 0.005 U | -- | < 0.1 U | 8.5 | < 0.05 U | 0.14 | < 2 U | < 2 U | < 2 U | < 6 U | 0.31 | < 0.05 U | 440 | 1,730 |
| | 6/10/2004 | N | -- | -- | < 0.05 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 400 | -- |
| | 12/7/2004 | N | -- | -- | < 0.01 U | -- | < 0.005 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 470 | -- |
| | 6/1/2005 | N | -- | -- | < 0.01 U | -- | -- | -- | -- | -- | -- | -- | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | 450 | -- |
| | 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 | 463 | 2,220 |
| | 1/19/2006 | 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 | 463 | 2,230 |
| | 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 | 500 | 2,100 |
| | 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 | < 0.095 U | < 0.05 U | 489 | -- |
| | 9/7/2007 | N | -- | 0.015 | -- | < 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 | 506 | -- |
| | 3/20/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | 1.6 | < 3 U | < 0.098 U | < 0.05 U | 547 | 2,280 |
| | 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 | < 0.097 U | < 0.05 U | 533 | 2,120 |
| | 3/16/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | < 0.2 U | 0.0057 | 0.0057 | 12 | 4.1 | 1.6 | < 3 U | < 0.095 U | < 0.05 U | 536 | 2,140 |
| | 8/21/2009 | N | -- | -- | -- | < 0.015 U | -- | < 0.02 U | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | 819 | -- |
| | 3/16/2010 | N | -- | < 0.05 U | -- | < 0.050 U | -- | < 0.01 U | -- | 0.111 | < 0.050 U | < 0.050 U | < 1 U | < 1 U | < 1 U | < 1 U | 0.055 | < 0.05 U | 465 | 2,180 |
| | 8/16/2010 | N | -- | 0.025 | -- | < 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 | 460 | 2,110 |
| | 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 | -- | -- | 432 | 2,220 |
| | 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 | -- | -- | 426 | 1,970 |
| | 5/7/2013 | N | 0.00936 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 | -- | -- | 394 | 1,930 |
| | 10/30/2013 | N | 0.0206 | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.0442 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 358 | 2,100 |
| | 5/14/2014 | N | 0.0193 J | -- | 0.00211 J | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 397 J | 1,940 |
| | 5/14/2014 | FD | 0.0185 J | -- | 0.00233 J | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 413 J | 2,080 |



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| 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** |
| MW078SA | 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 | < 1.00 U | -- | -- | **165** | **826** |
| | 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 | -- | -- | **161** | **839** |
| | 11/4/2013 | N | **0.0104 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | **0.0180 J** | -- | **0.540 J** | < 2.00 U | < 1.00 U | **3.73** | -- | -- | **132** | **793** |
| | 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 | -- | -- | **167** | **826** |
| | 11/13/2014 | N | **0.0227** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **155** | **840** |
| | 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 | -- | -- | **197** | **1,010** |
| | 11/12/2015 | N | **0.00966 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **215** | **875** |
| | 11/12/2015 | FD | **0.0113 J** | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **215** | **914** |
| | 3/18/2004 | N | -- | **0.01** | < 0.05 U | **0.11** | **0.078** | -- | **0.4** | **2.4** | **0.1** | **0.06** | < 2 U | < 2 U | < 2 U | < 6 U | < 0.27 U | < 0.05 U | **970** | **2,490** |
| | 6/3/2004 | N | -- | **0.02** | < 0.05 U | < 0.05 U | < 0.005 U | -- | **1** | **18.9** | **0.78** | **0.89** | -- | -- | -- | -- | -- | -- | **1,010** | -- |
| | 7/7/2004 | N | -- | < 0.05 U | < 0.2 U | < 0.2 U | < 0.1 U | -- | **56.8** | **66.3** | **17** | **22.6** | -- | -- | -- | -- | -- | -- | **1,100** | -- |
| | 8/17/2004 | N | -- | < 0.1 U | < 0.05 U | < 0.5 U | < 0.005 U | -- | **2.9** | **46** | **1.11** | **20** | -- | -- | -- | -- | -- | -- | **800** | -- |
| | 10/10/2004 | N | -- | < 0.01 U | **0.08** | **0.1** | < 0.1 U | -- | < 0.1 U | < 0.1 U | **2.87** | **3.41** | -- | -- | -- | -- | -- | -- | **1,130** | -- |
| | 11/22/2004 | N | -- | **0.006** | **0.01** | **0.016** | < 0.005 U | -- | **4.29** | **8.2** | **1.94** | **2.3** | -- | -- | -- | -- | -- | -- | **860** | **3,620** |
| | 1/5/2005 | N | -- | < 0.01 U | **0.01** | < 0.01 U | < 0.005 U | -- | **1.96** | **4.43** | **1.47** | **1.35** | -- | -- | -- | -- | -- | -- | **850** | **3,400** |
| | 1/27/2005 | N | -- | < 0.01 U | **0.02** | **0.02** | < 0.005 U | -- | **6.91** | **9.28** | **0.98** | **0.96** | -- | -- | -- | -- | -- | -- | **810** | **4,570** |
| | 2/16/2005 | N | -- | < 0.01 U | **0.02** | **0.03** | < 0.02 U | -- | **20.7** | **49.5** | **1.14** | **1.42** | -- | -- | -- | -- | -- | -- | **840** | **5,400** |
| | 3/15/2005 | N | -- | < 0.01 U | **0.01** | **0.02** | < 0.005 U | -- | **6.48** | **9.63** | **1.06** | **1.12** | -- | -- | -- | -- | -- | -- | **720** | **4,040** |
| | 4/18/2005 | N | -- | < 0.01 U | **0.02** | **0.02** | < 0.005 U | -- | **10.5** | **10.2** | **1.36** | **1.35** | -- | -- | -- | -- | -- | -- | **730** | **4,040** |
| | 6/2/2005 | N | -- | < 0.01 U | **0.01** | **0.01** | < 0.05 U | -- | **3.08** | **5.31** | **1.16** | **1.16** | -- | -- | -- | -- | -- | -- | **740** | **3,760** |
| | 6/20/2005 | N | -- | < 0.01 U | **0.01** | **0.01** | < 0.005 U | -- | **1.44** | **4.69** | **0.99** | **0.97** | -- | -- | -- | -- | -- | -- | **800** | **3,860** |
| | 7/20/2005 | N | -- | < 0.01 U | **0.01** | **0.01** | < 0.005 U | -- | **1.97** | **4.53** | **0.93** | **0.91** | -- | -- | -- | -- | -- | -- | **710** | **3,600** |
| | 2/3/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **1.63** | **0.435** | **0.435** | < 1 U | < 1 U | < 1 U | < 3 U | < 6 U | < 6 U | **917** | **2,560** |
| | 7/18/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | **0.3** | **0.269** | **0.269** | < 1 U | < 1 U | < 1 U | < 3 U | **0.14** | < 0.05 U | **774** | **2,190** |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| 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 | < 1 U | < 2 U | < 1 U | < 1 U | < 0.053 U | < 0.05 U | 229 | 1,170 |
| | 8/4/2010 | N | -- | 0.012 | -- | < 0.05 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 | 235 | 1,100 |
| | 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 | -- | -- | 291 | 1,110 |
| | 11/7/2012 | 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 | -- | -- | 295 | 1,100 |
| MW081SA | 3/25/2004 | N | -- | < 0.01 U | 0.15 | 0.16 | 0.086 | -- | 0.1 | 9.8 | < 0.05 U | 0.18 | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | 1,020 | 2,780 |
| | 6/3/2004 | N | -- | 0.06 | 0.06 | 0.05 | < 0.1 U | -- | 26.8 | 24.4 | 13.2 | 12.2 | -- | -- | -- | -- | -- | -- | 1,010 | -- |
| | 7/7/2004 | N | -- | 0.012 | 0.022 | 0.022 | 0.05 | -- | < 0.05 U | 1 | < 0.01 U | 0.02 | -- | -- | -- | -- | -- | -- | 1,100 | -- |
| | 8/17/2004 | N | -- | 0.03 | 0.07 | 0.08 | < 0.1 U | -- | 35.1 | 35.5 | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | 1,000 | -- |
| | 10/10/2004 | N | -- | < 0.01 U | < 0.05 U | < 0.05 U | < 0.005 U | -- | 2.4 | 2.4 | 2.5 | 2.75 | -- | -- | -- | -- | -- | -- | 950 | -- |
| | 11/23/2004 | N | -- | < 0.01 U | 0.04 | 0.04 | < 0.005 U | -- | 0.42 | 0.81 | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | 1,070 | 3,850 |
| | 1/5/2005 | N | -- | < 0.01 U | 0.02 | 0.03 | < 0.005 U | -- | < 0.4 U | 0.77 | 1.95 | 3.16 | -- | -- | -- | -- | -- | -- | 1,020 | 3,110 |
| | 1/13/2005 | N | -- | < 0.01 U | 0.03 | 0.03 | < 0.005 U | -- | 3.27 | 2.59 | 2.69 | 2.24 | -- | -- | -- | -- | -- | -- | 1,030 | 2,960 |
| | 1/27/2005 | N | -- | < 0.01 U | 0.03 | 0.02 | < 0.005 U | -- | < 0.4 U | 0.4 | 0.01 | 1.96 | -- | -- | -- | -- | -- | -- | 920 | 3,120 |
| | 2/16/2005 | N | -- | 0.01 | 0.01 | 0.03 | < 0.005 U | -- | 0.78 | 0.9 | 2.87 | < 0.01 U | -- | -- | -- | -- | -- | -- | 1,060 | 3,340 |
| | 3/16/2005 | N | -- | 0.01 | < 0.01 U | 0.01 | < 0.005 U | -- | 0.98 | 1.06 | 2.73 | 4.31 | -- | -- | -- | -- | -- | -- | 950 | 2,070 |
| | 4/19/2005 | N | -- | 0.01 | < 0.01 U | 0.01 | < 0.005 U | -- | 0.74 | 0.65 | 2.41 | 4.64 | -- | -- | -- | -- | -- | -- | 920 | 3,060 |
| | 6/2/2005 | N | -- | < 0.01 U | < 0.01 U | < 0.01 U | < 0.005 U | -- | 0.47 | 0.82 | 1.72 | 3.21 | -- | -- | -- | -- | -- | -- | 970 | 3,000 |
| | 6/21/2005 | N | -- | < 0.05 U | < 0.05 U | < 0.05 U | < 0.005 U | -- | 0.44 | 0.93 | 13.3 | 14 | -- | -- | -- | -- | -- | -- | 1,000 | 3,160 |
| | 7/20/2005 | N | -- | < 0.01 U | < 0.01 U | < 0.01 U | < 0.005 U | -- | 0.94 | 1.55 | 0.96 | 1.11 | -- | -- | -- | -- | -- | -- | 990 | 3,020 |
| | 2/2/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 2.24 | 0.356 | 0.356 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | 1,060 | 2,820 |
| | 7/18/2006 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.511 | 0.301 | 0.301 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.1 U | < 0.05 U | 1,120 | 2,550 |
| | 3/28/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 4.07 | 0.506 | 0.506 | < 1 U | < 1 U | < 1 U | < 3 U | 0.17 | < 0.05 U | 765 | -- |
| | 9/7/2007 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 1.13 | 0.23 | 0.23 | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | 582 | -- |



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ARCADIS Design & Consultancy for natural and built assets

| 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 |
| | 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 |
| MW081SA | 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 |
| MW082SA | 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 | 4.24 | -- | -- | -- | -- | -- | -- | 1,100 | 7,490 |
| | 5/25/2005 | N | -- | < 0.01 U | 0.02 | 0.03 | < 0.02 U | -- | 27.3 | 33.5 | 0.4 | 0.5 | -- | -- | -- | -- | -- | -- | 1,080 | 6,700 |
| | 6/28/2005 | N | -- | < 0.05 U | 0.16 | 0.16 | < 0.05 U | -- | 288 | 305 | 5 | 5.4 | -- | -- | -- | -- | -- | -- | 1,080 | 6,510 |
| | 7/14/2005 | N | -- | < 0.01 U | 0.12 | 0.13 | < 0.05 U | -- | < 0.4 U | < 0.4 U | 3.29 | 3.6 | -- | -- | -- | -- | -- | -- | 1,080 | 7,190 |
| | 2/3/2006 | N | -- | 0.0899 | -- | 0.0466 | -- | < 0.02 U | -- | 2.94 | 6.98 | 6.98 | 11 | < 5 U | 8 | < 15 U | < 6 U | < 45 U | 1,080 | 4,580 |
| | 7/14/2006 | N | -- | 0.0486 | -- | 0.0183 | -- | < 0.02 U | -- | < 0.2 U | 5.04 | 5.04 | < 1 U | < 1 U | < 1 U | < 3 U | 1 | 0.055 | 1,170 | 4,170 |
| | 7/14/2006 | FD | -- | 0.0526 | -- | 0.0232 | -- | < 0.02 U | -- | < 0.2 U | 5.67 | 5.67 | < 1 U | < 1 U | < 1 U | < 3 U | 1.2 | 0.052 | 1,260 | 4,270 |
| MW083SA | 3/22/2007 | N | -- | 0.0281 | -- | 0.0189 | -- | 0.08 | -- | 1.29 | 2.55 | 2.55 | 6.2 | < 1 U | < 1 U | < 3 U | 0.43 | < 0.05 U | 1,080 | -- |
| | 9/6/2007 | N | -- | 0.0204 | -- | < 0.015 U | -- | < 0.5 U | -- | 0.2 | 2.01 | 2.01 | 1.8 | < 1 U | < 1 U | < 3 U | 0.51 | < 0.05 U | 1,090 | -- |
| | 3/25/2008 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.2 U | -- | 0.456 | 1.26 | 1.26 | < 5 U | < 5 U | < 5 U | < 15 U | 0.69 | < 0.25 U | 1,160 | 3,520 |
| | 8/6/2008 | N | -- | < 0.02 U | -- | 0.0195 | -- | < 0.02 U | -- | < 0.2 U | 0.0103 | 0.0103 | < 1 U | < 1 U | < 1 U | < 3 U | 0.46 | < 0.05 U | 1,710 | 3,780 |
| | 3/18/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 8.65 | 1.12 | 1.12 | < 1 U | < 1 U | < 1 U | < 3 U | 0.36 | < 0.05 U | 1,470 | 4,020 |
| | 8/17/2009 | N | -- | < 0.02 U | -- | < 0.015 U | -- | < 0.02 U | -- | 0.52 | 1.09 | 1.09 | < 1 U | < 1 U | < 1 U | < 3 U | 0.42 | < 0.05 U | 1,980 | 4,170 |
| | 3/3/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | < 0.01 U | -- | 0.108 | 0.464 | 0.464 | < 1 U | < 2 U | < 1 U | < 1 U | 0.289 | < 0.05 U | 241 | 3,530 |
| | 8/4/2010 | N | -- | 0.022 | -- | < 0.05 U | -- | < 0.01 U | -- | 4.49 | 0.536 | 0.536 | < 1 U | < 2 U | < 1 U | < 1 U | 0.381 | < 0.05 U | 1,360 | 3,740 |
| | 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 | -- | -- | 1160 J | 3,460 |
| | 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 | -- | -- | 1,160 | 3,450 |
| | 5/6/2013 | N | < 0.0200 U | -- | < 0.0100 UJ | -- | -- | 0.00700 J | 0.0433 J | -- | 2.46 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,550 | 3,700 |
| | 10/31/2013 | N | < 0.0200 U | -- | < 0.0100 U | -- | -- | < 0.0100 U | 0.0594 J | -- | 0.246 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 729 | 2,870 |
| | 5/14/2014 | N | 0.0167 J | -- | 0.00157 J | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.0454 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1060 J | 3,430 |
| | 11/11/2014 | N | < 0.0200 U | -- | 0.00185 J | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.142 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 709 | 2,830 |
| | 5/15/2015 | N | 0.00861 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | 0.174 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 788 | 2,270 |



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ARCADIS Design & Consultancy for natural and built assets

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| | 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** |
| | 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** | -- |
| MW084SA | 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** |
| | 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** | -- | < 0.25 U | < 0.25 U | < 0.01 U | **0.01** | -- | -- | -- | -- | -- | -- | **1,740** | -- |
| | 10/20/2004 | N | -- | < 0.01 U | < 0.05 U | < 0.05 U | **0.01** | -- | < 0.1 U | **0.1** | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | **1,680** | -- |
| | 12/9/2004 | N | -- | < 0.01 U | **0.14** | **0.09** | **0.099** | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | **1,510** | **3,820** |
| | 1/13/2005 | N | -- | < 0.01 U | **0.09** | **0.07** | < 0.1 U | -- | < 0.4 U | **0.44** | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | **1,600** | **4,060** |
| | 2/2/2005 | N | -- | < 0.01 U | **0.08** | **0.1** | **0.006** | -- | < 0.4 U | < 0.4 U | < 0.01 U | < 0.01 U | -- | -- | -- | -- | -- | -- | **1,520** | **4,200** |
| | 3/1/2005 | N | -- | < 0.01 U | **0.01** | **0.01** | **0.017** | -- | < 0.4 U | **0.41** | **0.02** | **0.02** | -- | -- | -- | -- | -- | -- | **1,720** | **3,930** |
| | 3/24/2005 | N | -- | < 0.01 U | **0.14** | **0.03** | **0.085** | -- | < 0.4 U | < 0.4 U | **0.02** | **0.04** | -- | -- | -- | -- | -- | -- | **1,350** | **3,630** |
| | 4/27/2005 | N | -- | < 0.01 U | **0.12** | **0.07** | **0.05** | -- | < 0.4 U | < 0.4 U | **0.05** | **0.04** | -- | -- | -- | -- | -- | -- | **1,390** | **3,750** |
| | 5/24/2005 | N | -- | < 0.01 U | **0.13** | **0.14** | **0.04** | -- | < 0.4 U | < 0.4 U | **0.03** | **0.03** | -- | -- | -- | -- | -- | -- | **1,330** | **3,690** |
| | 6/20/2005 | N | -- | < 0.01 U | **0.12** | **0.04** | **0.04** | -- | < 0.4 U | < 0.4 U | **0.02** | **0.02** | -- | -- | -- | -- | -- | -- | **1,580** | **4,080** |
| | 6/20/2005 | FD | -- | < 0.01 U | **0.14** | **0.14** | **0.05** | -- | < 0.4 U | < 0.4 U | **0.03** | **0.02** | -- | -- | -- | -- | -- | -- | **1,410** | **3,950** |
| | 7/18/2005 | N | -- | < 0.01 U | **0.23** | **0.1** | **0.31** | -- | < 0.4 U | < 0.4 U | **0.06** | **0.03** | -- | -- | -- | -- | -- | -- | **1,610** | **4,030** |
| | 7/19/2005 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 2/3/2006 | N | -- | < 0.02 U | -- | **0.103** | -- | < 0.02 U | -- | **0.89** | **0.24** | **0.24** | < 1 U | < 1 U | < 1 U | < 3 U | < 3 U | < 12 U | **1,480** | **3,940** |
| | 7/14/2006 | N | -- | < 0.02 U | -- | **0.0191** | -- | < 0.02 U | -- | < 0.2 U | **0.0221** | **0.0221** | < 1 U | < 1 U | < 1 U | < 3 U | **0.31** | < 0.05 U | **1,840** | **4,250** |
| | 3/21/2007 | N | -- | < 0.02 U | -- | **0.0256** | -- | < 0.02 U | -- | **1.52** | **0.0917** | **0.0917** | < 1 U | < 1 U | < 1 U | < 3 U | **0.48** | < 0.05 U | **1,380** | -- |
| | 9/6/2007 | N | -- | < 0.02 U | -- | **0.0176** | -- | < 0.02 U | -- | **1.31** | **0.111** | **0.111** | < 1 U | < 1 U | < 1 U | < 3 U | **0.88** | < 0.05 U | **1,270** | -- |
| MW085SA | 3/25/2008 | N | -- | < 0.02 U | -- | **0.0266** | -- | < 0.02 U | -- | < 0.2 U | **0.0089** | **0.0089** | < 1 U | < 1 U | < 1 U | < 3 U | **0.49** | < 0.05 U | **1,740** | **4,150** |
| | 8/5/2008 | N | -- | < 0.02 U | -- | **0.0238** | -- | < 0.02 U | -- | < 0.2 U | **0.0061** | **0.0061** | < 1 U | < 1 U | < 1 U | < 3 U | **0.28** | < 0.05 U | **1,620** | **4,160** |
| | 3/18/2009 | N | -- | < 0.02 U | -- | **0.0199** | -- | < 0.02 U | -- | **0.435** | **0.197** | **0.197** | < 1 U | < 1 U | < 1 U | < 3 U | **7.2** | < 0.05 U | **1,160** | **3,450** |
| | 8/17/2009 | N | -- | < 0.02 U | -- | **0.0156** | -- | < 0.02 U | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | **0.44** | < 0.05 U | **1,300** | **4,140** |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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 |
| | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 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 |
| MW086SA | 11/11/2015 | N | 0.0152 J | -- | < 0.0100 U | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | 765 | 2200 J |
| MW086SA | 5/18/2016 | N | 0.0216 | -- | 0.0416 | -- | 0.0432 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,040 | 2,540 |
| MW086SA | 9/19/2016 | N | < 0.00336 U | -- | 0.055 | -- | 0.049 | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | 1,160 | 3,600 |
| MW086SA | 5/9/2017 | N | 0.0103 | -- | 0.0549 | -- | 0.0084 J | -- | 0.241 J | -- | 0.00381 | -- | -- | -- | -- | -- | -- | -- | 1,470 | 3,800 |
| MW086SA | 9/20/2017 | N | 0.0111 | -- | 0.0475 | -- | 0.0464 | -- | 0.515 | -- | 0.0101 | -- | -- | -- | -- | -- | -- | -- | 1,370 | 3,420 |
| MW086SA | 3/22/2018 | Reg | -- | 0.00957 | -- | 0.039 | -- | 0.0341 | 0.266 | -- | -- | 0.00512 | -- | -- | -- | -- | -- | -- | 1,260 | 2,640 |
| MW086SA | 9/11/2018 | Reg | 0.0123 | -- | 0.034 | -- | 0.0255 | -- | -- | < 0.100 U | 0.00153 J | -- | -- | -- | -- | -- | -- | -- | 1,260 | 3,110 |
| MW087A | 9/14/2004 | N | -- | < 0.01 U | 4.29 | 4.23 | 1.8 | -- | < 0.1 U | 0.2 | < 0.05 U | < 0.05 U | < 2 U | < 2 U | < 2 U | < 6 U | < 0.25 U | < 0.05 U | 900 | -- |
| MW087A | 10/5/2004 | N | -- | < 0.01 U | 3.66 | 3.82 | 1.8 | -- | < 0.1 U | < 0.1 U | < 0.05 U | < 0.05 U | -- | -- | -- | -- | -- | -- | 800 | -- |
| MW087A | 11/9/2004 | N | -- | < 0.01 U | 5.06 | 4.62 | < 2 U | -- | 0.42 | < 0.4 U | < 0.01 U | 0.01 | -- | -- | -- | -- | -- | -- | 1,060 | 4,210 |
| MW087A | 12/16/2004 | N | -- | < 0.01 U | 4.63 | 4.78 | 2 | -- | < 0.4 U | < 0.4 U | 0.01 | 0.02 | -- | -- | -- | -- | -- | -- | 1,160 | 4,520 |
| MW087A | 1/13/2005 | N | -- | < 0.01 U | 3.78 | 3.97 | 3.2 | -- | < 0.4 U | < 0.4 U | 0.39 | 0.42 | -- | -- | -- | -- | -- | -- | 1,260 | 4,710 |
| MW087A | 2/8/2005 | N | -- | < 0.01 U | 1.75 | 2.23 | 1.2 | -- | < 0.4 U | 1 | 1.59 | 1.89 | -- | -- | -- | -- | -- | -- | 1,220 | 4,730 |
| MW087A | 3/8/2005 | N | -- | < 0.01 U | 1.07 | 2.03 | 0.47 | -- | < 0.4 U | 0.65 | 1.67 | 1.64 | -- | -- | -- | -- | -- | -- | 1,180 | 4,610 |
| MW087A | 4/6/2005 | N | -- | < 0.01 U | 0.44 | 1.99 | < 0.005 U | -- | < 0.4 U | 0.67 | 1.35 | 1.55 | -- | -- | -- | -- | -- | -- | 1,150 | 4,510 |
| MW087A | 5/11/2005 | N | -- | < 0.01 U | 0.45 | 1.59 | 0.12 | -- | < 0.4 U | < 0.4 U | 1.38 | 1.41 | -- | -- | -- | -- | -- | -- | 1,150 | 4,510 |
| MW087A | 6/7/2005 | N | -- | < 0.01 U | 0.69 | 1.56 | 0.13 | -- | < 0.4 U | < 0.4 U | 1.1 | 1.11 | -- | -- | -- | -- | -- | -- | 1,120 | 4,380 |
| MW087A | 7/6/2005 | N | -- | 0.01 | 0.33 | 1.73 | < 0.02 U | -- | < 0.4 U | 0.94 | 1.14 | 1.11 | -- | -- | -- | -- | -- | -- | 1,140 | 4,180 |
| MW087A | 8/2/2005 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW087A | 2/6/2006 | N | -- | 0.0222 | -- | 0.449 | -- | < 0.5 U | -- | 14.5 | 6.61 | 6.61 | < 5 U | < 5 U | < 5 U | < 15 U | < 60 U | < 60 U | 1,560 | 5,910 |
| MW087A | 7/18/2006 | N | -- | < 0.02 U | -- | 0.144 | -- | < 0.02 U | -- | 0.217 | 3.5 | 3.5 | < 5 U | < 5 U | < 5 U | < 15 U | 6.4 | 0.27 | 1,100 | 4,620 |
| MW087A | 4/13/2007 | N | -- | < 0.02 U | -- | 0.173 | -- | < 0.02 U | -- | 13 | 1.72 | 1.72 | < 2 U | < 1 U | < 1 U | < 3 U | 5.1 | 2.4 | 1,160 | -- |
| MW087A | 4/15/2008 | N | -- | 0.0276 | -- | 0.187 | -- | < 1 U | -- | 4.27 | 1.4 | 1.4 | < 5 U | < 5 U | < 5 U | < 15 U | 4.8 | < 0.25 U | 1,550 | 4,520 |
| MW087A | 3/30/2009 | N | -- | 0.0241 | -- | 0.233 | -- | < 0.2 U | -- | 1.23 | 0.786 | 0.786 | < 5 U | < 5 U | < 5 U | < 15 U | 1.7 | < 0.25 U | 1,060 | 4,380 |
| MW087A | 3/10/2010 | N | -- | < 0.05 U | -- | 0.095 | -- | 0.316 | -- | 0.064 | 0.261 | 0.261 | < 1 U | < 1 U | < 1 U | < 1 U | 0.522 | 0.072 | 35.5 | 3,500 |
| MW087A | 5/25/2012 | N | < 0.0100 U | -- | 0.0996 | -- | -- | 0.0479 | 0.32 | -- | 0.0216 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,170 | 3,860 |
| MW087A | 5/16/2013 | N | 0.0201 | -- | 0.0596 | -- | -- | 0.0162 | 0.661 | -- | 0.0851 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,120 | 2,450 |
| MW087A | 5/8/2014 | N | < 0.0200 U | -- | 0.0351 | -- | -- | < 0.0500 U | 0.202 | -- | 0.197 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,070 | 4,290 |



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ARCADIS Design & Consultancy for natural and built assets

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| | | 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** |
| | 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** |
| MW088M | 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** |
| | 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** |
| MW089SA | 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** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **815** | **2,700** |
| | 5/4/2017 | N | **0.0101** | -- | **1.15** | -- | **1.02** | -- | < 0.02 U | -- | < 0.002 U | -- | -- | -- | -- | -- | -- | -- | **948** | **3,160** |
| | 9/22/2017 | N | **0.0112** | -- | **1.24** | -- | **1.26** | -- | < 0.1 U | -- | **0.000274 J** | -- | -- | -- | -- | -- | -- | -- | **905** | **4,240** |
| | 4/4/2018 | Reg | -- | **0.0102** | -- | **1.14** | -- | **1.02** | < 0.100 U | -- | -- | **0.000901 J** | -- | -- | -- | -- | -- | -- | **1,020** | **3,730** |
| | 9/14/2018 | Reg | **0.0109** | -- | **1.18** | -- | **1.04** | -- | -- | < 0.100 U | **0.000448 J** | -- | -- | -- | -- | -- | -- | -- | **1,040** | **3,780** |
| | 2/9/2006 | N | -- | < 0.02 U | -- | **0.437** | -- | **0.45** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **575** | **2,870** |
| | 7/21/2006 | N | -- | < 0.02 U | -- | **0.42** | -- | **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 | **630** | **2,990** |
| | 4/3/2007 | N | -- | < 0.02 U | -- | **0.484** | -- | **0.49** | -- | < 0.2 U | **0.0051** | **0.0051** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.099 U | < 0.05 U | **633** | -- |
| | 4/14/2008 | N | -- | < 0.02 U | -- | **0.569** | -- | **0.59** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.11 U | < 0.05 U | **650** | **3,100** |
| | 3/17/2009 | N | -- | < 0.02 U | -- | **0.634** | -- | **0.54** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.098 U | < 0.05 U | **652** | **3,230** |
| | 8/11/2009 | N | -- | < 0.02 U | -- | **0.58** | -- | **0.52** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **648** | **3,290** |
| | 3/2/2010 | N | -- | < 0.05 U | -- | **0.488** | -- | **0.452** | -- | **0.066** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | < 0.058 U | < 0.05 U | **596** | **3,160** |
| MW090SA | 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 | -- | -- | **297** | **1,450** |
| | 5/14/2013 | N | < 0.0200 U | -- | **0.00542 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **166** | **1,150** |
| | 5/22/2014 | N | < 0.0200 U | -- | **0.00579 J** | -- | -- | < 0.0100 U | < 0.200 U | -- | < 0.0200 UJ | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **281** | **1,950** |
| | 5/29/2015 | N | **0.0135 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 | -- | -- | **139** | **1,100** |
| | 5/19/2016 | N | **0.0239** | -- | **0.185** | -- | **0.171** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **491** | **2,840** |
| | 5/4/2017 | N | **0.0094** | -- | **0.194** | -- | **0.188** | -- | < 0.02 U | -- | < 0.002 U | -- | -- | -- | -- | -- | -- | -- | **471** | **2,460** |
| | 5/4/2017 | FD | **0.00813** | -- | **0.187** | -- | **0.19** | -- | < 0.02 U | -- | < 0.002 U | -- | -- | -- | -- | -- | -- | -- | **374** | **2,320** |
| | 4/4/2018 | Reg | -- | **0.00926** | -- | **0.263** | -- | **0.258** | < 0.100 U | -- | -- | **0.000541 J** | -- | -- | -- | -- | -- | -- | **520** | **2,280** |
| | 2/9/2006 | N | -- | < 0.02 U | -- | **0.746** | -- | **0.67** | -- | < 0.2 U | **0.0051** | **0.0051** | < 1 U | < 1 U | < 1 U | < 3 U | < 0.6 U | < 0.6 U | **679** | **2,530** |



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ARCADIS Design & Consultancy for natural and built assets

| 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 |
| MW093SA | 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 |
| | 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 | -- | < 0.0100 U | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 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 | -- | -- | -- | -- | -- | -- | -- | 1,060 | 4,190 |
| | 5/11/2017 | N | 0.00835 | -- | 1.62 | -- | 1.72 | -- | 0.0465 | -- | 0.0363 | -- | -- | -- | -- | -- | -- | -- | 873 | 4,000 |
| | 4/3/2018 | Reg | -- | 0.0095 | -- | 1.74 | -- | 1.65 | < 0.100 U | -- | -- | 0.0140 J | -- | -- | -- | -- | -- | -- | 960 | 3,390 |
| MW095 | 5/25/2012 | N | < 0.0100 U | -- | 4.46 | -- | -- | 4.68 | < 0.200 U | -- | 0.0881 | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | 1,290 | 4,590 |
| | 5/25/2012 | FD | < 0.0100 U | -- | 4.58 | -- | -- | 4.87 | < 0.200 U | -- | 0.0802 | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | 1,300 | 4,540 |
| | 10/31/2012 | N | -- | < 0.0100 U | -- | 5.18 | -- | 4.98 | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,360 | 4,330 |
| | 5/15/2013 | N | 0.0130 J | -- | 4.81 | -- | -- | 4.83 | < 0.200 U | -- | 0.0761 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,510 | 4,630 |
| | 11/6/2013 | N | 0.0187 J | -- | 4.28 | -- | -- | 4.31 | < 0.200 U | -- | 0.0902 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,150 | 3,940 |
| | 5/9/2014 | N | 0.0266 | -- | 3.83 | -- | -- | 3.76 | < 0.200 U | -- | 0.109 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,290 | 4,340 |
| | 11/6/2014 | N | 0.0513 | -- | 3.92 | -- | -- | 3.67 | < 0.200 UJ | -- | 0.0905 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,330 | 4,950 |
| | 5/21/2015 | N | 0.0208 | -- | 4.35 | -- | -- | 4.71 | < 0.200 U | -- | 0.0734 | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | 1,500 | 5,320 |
| | 11/5/2015 | N | < 0.0200 U | -- | 5.03 | -- | -- | 4.85 | < 0.200 U | -- | 0.0423 | -- | -- | -- | -- | -- | -- | -- | 1,540 | 4,160 |
| | 5/13/2016 | N | 0.0705 | -- | 4.49 | -- | 4.65 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1,460 | 4,170 |
| | 9/21/2016 | N | < 0.00336 U | -- | 4.29 | -- | 5.34 | -- | < 0.00616 U | -- | 0.0695 | -- | -- | -- | -- | -- | -- | -- | 1,660 | 4,420 |
| | 9/21/2016 | FD | < 0.00336 U | -- | 4.24 | -- | 5.57 | -- | < 0.00616 U | -- | 0.0622 | -- | -- | -- | -- | -- | -- | -- | 1,340 | 4,740 |
| | 5/11/2017 | N | 0.00731 | -- | 4.07 | -- | 4.06 | -- | 0.0336 | -- | 0.0688 | -- | -- | -- | -- | -- | -- | -- | 1,650 | 6,570 |
| | 3/29/2018 | Reg | -- | 0.00933 | -- | 4.15 | -- | 1.03 | < 0.1 | -- | -- | 0.132 | -- | -- | -- | -- | -- | -- | 1,520 | 4,020 |
| | 9/13/2018 | Reg | 0.00984 J | -- | 3.93 | -- | 3.62 | -- | -- | < 0.500 U | 0.14 | -- | -- | -- | -- | -- | -- | -- | 1,380 | 3,650 |
| MW096P | 6/21/2012 | N | -- | < 0.0400 U | -- | < 0.0400 U | -- | -- | -- | -- | -- | -- | < 1.00 U | < 1.00 U | < 1.00 U | < 1.00 U | -- | -- | -- | -- |
| | 7/11/2012 | N | -- | -- | -- | 0.0664 | -- | 0.0229 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 8/3/2012 | N | -- | -- | -- | 0.0229 | -- | 0.0133 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 9/6/2012 | N | -- | -- | -- | < 0.0100 U | -- | < 0.0100 U | < 0.200 U | < 0.200 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 11/19/2012 | N | -- | -- | -- | 0.0177 | -- | < 0.0100 U | < 0.200 U | < 0.200 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |



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ARCADIS Design & Consultancy for natural and built assets

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| Location ID | Sample Date | Sample Type | Chemical Name / Units / NMWQCC Standard | Dissolved Arsenic mg/l 0.1 | Total Arsenic mg/l 0.1 | Dissolved Chromium mg/l 0.05 | Total Chromium mg/l 0.05 | Dissolved Chromium VI mg/l 0.05 | Total Chromium VI mg/l 0.05 | Dissolved Iron mg/l 1 | Total Iron mg/l 1 | Dissolved Manganese mg/l 0.2 | Total Manganese mg/l 0.2 | Benzene ug/l 5 | Toluene ug/l 1,000 | Ethylbenzene ug/l 700 | Total Xylenes ug/l 620 | DRO mg/l | GRO mg/l | Chloride mg/l 250 | TDS mg/l 1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| | 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 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MW097P | 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 |
| | 5/11/2017 | N | | 0.0375 | -- | 0.00134 J | -- | < 0.01 U | -- | 0.0509 J | -- | 0.387 | -- | -- | -- | -- | -- | -- | -- | 74 | 336 |
| MW099 | 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 |
| | 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 |
| MW100 | 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 |
| | 1/19/1999 | N | | < 0.1 U | -- | < 0.05 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 920 | 2,300 |
| RW001 | 2/17/1999 | N | | -- | -- | 1.3 | -- | -- | -- | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 1 U | -- | -- | 910 | 3,600 |
| | 2/18/1999 | N | | -- | -- | 1.4<br>1.4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 920<br>1000 | 3700<br>3700 |
| | 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 | -- | 3.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/12/2001 | N | | -- | -- | -- | 4.15 | -- | 4.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/13/2001 | N | | -- | -- | -- | 4.09<br>4.09 | -- | 3.5<br>3.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 2/4/2002 | N | | -- | -- | 4.2 | -- | 3.2 | -- | < 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<br>0.44 | -- | < 0.1 U | 0.1 | 0.07 | 0.08 | -- | -- | -- | -- | -- | -- | 1,080 | -- |
| | 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 | -- |
| RW002 | 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 |



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| | | 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 |
| | 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 | -- |
| RW003 | 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<br>4.19 | -- | 2<br>1.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/7/2001 | N | -- | -- | -- | 4.17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/8/2001 | N | -- | -- | -- | 4.28 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 2/4/2002 | N | -- | -- | 4.33 | -- | 3.5 | -- | < 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 | -- |



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ARCADIS Design & Consultancy for natural and built assets

Received by OCD: 3/25/2020 3:43:14 PM

| | | 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 | | | | | | | | | | | | | | | | | | |
| RW004A | 7/1/2003 | N | -- | < 0.05 U | **0.07** | **0.07** | < 0.05 U | -- | **11** | **11.5** | **1.66** | **1.73** | -- | -- | -- | -- | -- | -- | **2,300** | -- |
| | 7/9/2003 | N | -- | < 0.05 U | < 0.05 U | **0.08** | < 0.05 U | -- | **6.2** | **22.2** | **0.78** | **2.47** | -- | -- | -- | -- | -- | -- | **3,000** | -- |
| | 7/15/2003 | N | -- | < 0.05 U | **0.1** | **0.07** | < 0.1 U<br>< 1 U | -- | **23.4** | **22.3** | **2.12** | **1.95** | -- | -- | -- | -- | -- | -- | **1,900** | -- |
| | 7/28/2003 | N | -- | < 0.5 U | < 0.5 U | **0.6** | < 0.02 U | -- | **191** | **19.6** | **14.9** | **1.59** | -- | -- | -- | -- | -- | -- | **1,500** | -- |
| | 8/21/2003 | N | -- | < 0.05 U | **0.13** | **0.12** | < 0.005 U | -- | **66.3** | **75.8** | **3.62** | **4.23** | -- | -- | -- | -- | -- | -- | **1,500** | -- |
| | 10/1/2003 | N | -- | < 0.05 U | **0.57** | **0.41** | < 0.1 U | -- | **50.2** | **54.4** | **4.55** | **4.94** | -- | -- | -- | -- | -- | -- | **4,500** | -- |
| | 10/29/2003 | N | -- | < 0.05 U | **0.21** | **0.24** | < 0.005 U | -- | **127** | **145** | **20.3** | **21.9** | -- | -- | -- | -- | -- | -- | **3,000** | -- |
| | 12/9/2003 | N | -- | < 0.05 U | **0.23** | **0.21** | < 0.01 U | -- | **124** | **123** | **11.1** | **17.9** | -- | -- | -- | -- | -- | -- | **1,400** | -- |
| | 1/8/2004 | N | -- | < 0.5 U | < 0.5 U | < 0.5 U | < 0.005 U | -- | **75** | **84** | **11** | **8.8** | -- | -- | -- | -- | -- | -- | **1,300** | **32,600** |
| | 3/2/2004 | N | -- | < 0.05 U | **0.78** | **0.77** | < 0.05 U | -- | **532** | **543** | **35.7** | **82.5** | -- | -- | -- | -- | -- | -- | **1,800** | -- |
| | 4/1/2004 | N | -- | < 0.01 U | **0.09** | **0.1** | < 0.1 U | -- | **76.2** | **84.1** | **4.05** | **4.99** | -- | -- | -- | -- | -- | -- | **1,240** | **22,400** |
| | 5/4/2004 | N | -- | < 0.1 U | < 0.5 U | < 0.5 U | < 0.1 U | -- | **122** | **179** | **16.1** | **25** | -- | -- | -- | -- | -- | -- | **2,200** | -- |
| | 6/8/2004 | N | -- | < 0.01 U | **0.21** | **0.26** | < 0.1 U | -- | **191** | **225** | **29.4** | **36.4** | -- | -- | -- | -- | -- | -- | **2,700** | -- |
| | 7/8/2004 | N | -- | < 0.01 U | **0.2** | **0.3** | < 0.1 U | -- | **221** | **291** | **19** | **35.1** | -- | -- | -- | -- | -- | -- | **1,900** | -- |
| | 8/11/2004 | N | -- | < 0.01 U | < 0.05 U | < 0.05 U | < 0.1 U | -- | **30.9** | **35.1** | **2.86** | **3.11** | -- | -- | -- | -- | -- | -- | **2,000** | -- |
| | 9/16/2004 | N | -- | < 0.05 U | < 0.2 U | < 0.2 U | < 0.1 U | -- | **166** | **166** | **5** | **5.2** | -- | -- | -- | -- | -- | -- | **1,240** | -- |
| | 10/5/2004 | N | -- | < 0.01 U | **0.08** | < 0.05 U | **0.2** | -- | **54.7** | **80** | **4.38** | **0.6** | -- | -- | -- | -- | -- | -- | **1,740** | -- |
| | 11/9/2004 | N | -- | < 0.1 U | < 0.1 U | **0.1** | < 0.1 U | -- | **78.1** | **82.1** | **8.6** | **9.2** | -- | -- | -- | -- | -- | -- | **1,170** | **34,000** |
| | 11/15/2004 | N | -- | -- | -- | -- | **1.9** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/20/2004 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.005 U | -- | **81.1** | **76.8** | **9.3** | **11.3** | -- | -- | -- | -- | -- | -- | **1,140** | -- |
| | 1/18/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.005 U | -- | **65.1** | **78.5** | **12.5** | **14.9** | -- | -- | -- | -- | -- | -- | **390** | -- |
| | 2/14/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | **46.9** | **54.4** | **6.5** | **8.5** | -- | -- | -- | -- | -- | -- | **260** | -- |
| | 3/8/2005 | N | -- | < 0.01 U | < 0.1 U | < 0.01 U | **0.006** | -- | **30.6** | **2.91** | **5.6** | **0.52** | -- | -- | -- | -- | -- | -- | **220** | -- |
| | 4/11/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | **68.3** | **66.1** | **10.3** | **10** | -- | -- | -- | -- | -- | -- | **410** | -- |
| | 5/12/2005 | N | -- | < 0.1 U | < 0.1 U | < 0.1 U | < 0.05 U | -- | **43.2** | **46.7** | **4.5** | **4.9** | -- | -- | -- | -- | -- | -- | **640** | -- |
| | 6/8/2005 | N | -- | < 0.05 U | **0.06** | **0.06** | < 0.05 U | -- | **48.1** | **49.3** | **5.24** | **5.68** | -- | -- | -- | -- | -- | -- | **400** | -- |
| | 7/7/2005 | N | -- | < 0.05 U | **0.05** | **0.05** | < 0.05 U | -- | **51.5** | **51.8** | **7.6** | **7.7** | -- | -- | -- | -- | -- | -- | **440** | -- |
| | 2/10/2006 | N | -- | **0.0207** | -- | < 0.015 U | -- | < 0.08 U | -- | **70.3** | **3.1** | **3.1** | < 50 U | < 50 U | < 50 U | < 150 U | < 120 U | < 300 U | **138** | **3,420** |
| | 7/19/2006 | N | -- | < 0.02 U | -- | **0.0213** | -- | < 0.02 U | -- | **223** | **4.77** | **4.77** | < 10 U | < 10 U | < 10 U | < 30 U | **130** | **9.9** | **147** | **4,890** |
| | 4/11/2007 | N | -- | **0.1** | -- | < 0.075 U | -- | < 2.0 U | -- | **478** | **7.68** | **7.68** | < 100 U | < 100 U | < 100 U | < 300 U | **340** | **23** | **209** | -- |
| | 4/16/2008 | N | -- | **0.0672** | -- | **0.0712** | -- | < 1 U | -- | **697** | **9.38** | **9.38** | < 10 U | < 5 U | < 5 U | < 15 U | **890** | **22** | **256** | **13,900** |
| | 3/31/2009 | N | -- | **0.0257** | -- | **0.0436** | -- | < 0.2 U | -- | **986** | **13** | **13** | **290** | < 10 U | **230** | **34** | **710** | **19** | **291** | **14,900** |
| | 3/10/2010 | N | -- | < 0.50 U | -- | < 0.050 U | -- | **0.842** | -- | **661** | **13.3** | **13.3** | < 5 U | < 5 U | < 5 U | < 5 U | **1300** | **9.83** | **126** | **14,600** |
| | 5/25/2012 | N | < 0.0500 U | -- | < 0.0500 U | -- | -- | **2.96** | **9.8** | -- | **1.16** | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | **480** | **3,900** |
| | 5/20/2013 | N | **0.0102 J** | -- | **0.026** | -- | -- | < 0.100 U | **7.25** | -- | **0.215** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **462** | **3,780** |
| | 5/8/2014 | N | **0.0146 J** | -- | **0.0245** | -- | -- | < 0.0500 U | **8.67** | -- | **0.273** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **541** | **4,180** |
| | 6/3/2015 | N | **0.0189 J** | -- | **0.0201** | -- | -- | < 0.200 U | **8.98 J** | -- | **0.276** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **581** | **4,500** |
| | 5/20/2016 | N | **0.0253** | -- | **0.0273** | -- | < 0.0548 U | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **805** | **3,500** |
| | 5/4/2017 | N | **0.036** | -- | **0.0285** | -- | < 0.01 U | -- | **23.1** | -- | **0.274** | -- | -- | -- | -- | -- | -- | -- | **573** | **3,310** |
| TEAGUE | 5/22/2014 | N | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **1,180** | -- |
| | 5/11/2017 | N | **0.00457** | -- | **0.00844** | -- | < 0.01 U | -- | **0.0466 J** | -- | **0.0185** | -- | -- | -- | -- | -- | -- | -- | **1,170** | **2,830** |
| WoodellWW | 6/14/1996 | N | < 0.10 U | -- | **0.66** | -- | -- | -- | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 1 U | -- | -- | **782** | -- |
| | 8/1/1996 | N | -- | -- | **0.82** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 4/23/1997 | N | < 0.10 U | -- | **0.52** | -- | -- | -- | -- | -- | -- | -- | < 1 U | < 1 U | < 1 U | < 1 U | -- | -- | **800** | **2,600** |
| | 1/20/1999 | N | < 0.10 U | -- | **0.69** | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **900** | **2,800** |
| | 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 | **699** | **2,390** |
| | 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 | < 0.097 U | < 0.05 U | **602** | **1,900** |
| | 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 | < 0.097 U | < 0.05 U | **621** | -- |
| | 4/15/2008 | N | -- | < 0.02 U | -- | **0.0523** | -- | **0.035** | -- | **1.14** | < 0.02 U | < 0.02 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.099 U | < 0.05 U | **305** | **1,060** |
| | 8/21/2008 | N | -- | < 0.02 U | -- | **0.0254** | -- | < 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 | **558** | **1,820** |
| | 3/24/2009 | N | -- | < 0.02 U | -- | **0.0296** | -- | **0.022** | -- | < 0.2 U | < 0.005 U | < 0.005 U | < 1 U | < 1 U | < 1 U | < 3 U | < 0.096 U | < 0.05 U | **690** | **1,780** |
| | 8/24/2009 | N | -- | < 0.02 U | -- | **0.0561** | -- | **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 | **615** | **1,480** |
| | 3/2/2010 | N | -- | < 0.05 U | -- | < 0.05 U | -- | **0.035** | -- | **0.098** | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | < 0.051 U | < 0.05 U | **478** | **2,620** |
| | 8/18/2010 | N | -- | **0.022** | -- | < 0.05 U | -- | **0.019** | -- | < 0.1 U | < 0.050 U | < 0.050 U | < 1 U | < 2 U | < 1 U | < 1 U | **0.073** | < 0.05 U | **380** | **2,120** |
| | 5/16/2012 | N | < 0.0100 U | -- | **0.0421** | -- | -- | **0.038** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 UJ | < 2.00 UJ | < 1.00 UJ | < 1.00 UJ | -- | -- | **579 J** | **2,500** |
| | 10/31/2012 | N | -- | < 0.0100 U | -- | **0.0314** | -- | **0.0285** | -- | < 0.200 U | < 0.0200 U | < 0.0200 U | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **582** | **1,940** |
| | 5/22/2013 | N | **0.00973 J** | -- | **0.0329** | -- | -- | **0.0299** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **634** | **2,240** |
| | 10/31/2013 | N | **0.00793 J** | -- | **0.0866** | -- | -- | **0.0843** | < 0.200 U | -- | **0.0623** | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **775** | **2,820** |
| | 5/29/2014 | N | **0.00857 J** | -- | **0.0446** | -- | -- | **0.0341** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **580** | **2,400** |
| | 11/14/2014 | N | **0.0168 J** | -- | **0.0967** | -- | -- | **0.0638** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **558** | **2,120** |
| | 5/11/2015 | N | **0.00702 J** | -- | **0.0203** | -- | -- | **0.0152** | < 0.200 U | -- | < 0.0200 U | -- | < 1.00 U | < 2.00 U | < 1.00 U | < 1.00 U | -- | -- | **711** | **2,330** |
| | 11/13/2015 | N | < 0.0200 U | -- | **0.0268** | -- | -- | **0.0288** | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **584** | **2,080** |
| | 11/13/2015 | FD | < 0.0200 U | -- | **0.0265** | -- | -- | **0.0281** | < 0.200 U | -- | < 0.0200 U | -- | -- | -- | -- | -- | -- | -- | **590** | **2,140** |
| | 9/19/2016 | N | < 0.00336 U | -- | **0.0766** | -- | **0.071** | -- | < 0.00616 U | -- | < 0.000585 U | -- | -- | -- | -- | -- | -- | -- | **622** | **1,980** |
| | 5/11/2017 | N | **0.0095** | -- | **0.115** | -- | **0.113** | -- | **0.0826 J** | -- | **0.000684 J** | -- | -- | -- | -- | -- | -- | -- | **532** | **1,630** |

**Notes:**
he NMWQCC Standard are highlighted



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**Appendix E**
**Historical Analytical Data (through 2017)**
**2018 Annual Groundwater Monitoring Report**
**Former Eunice North Gas Plant**

ARCADIS Design & Consultancy for natural and built assets

| 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 | | | | | | | | | | | | | | | | | | | | |
| J = estimated value | | | | | | | | | | | | | | | | | | | | |
| /l = milligrams per liter | | | | | | | | | | | | | | | | | | | | |
| N = Normal Sample | | | | | | | | | | | | | | | | | | | | |
| xico Water Quality Control Commission | | | | | | | | | | | | | | | | | | | | |
| = total dissolved solids | | | | | | | | | | | | | | | | | | | | |
| U = non-detect | | | | | | | | | | | | | | | | | | | | |
| = micrograms per liter | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
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# APPENDIX F

## Historical Analytical Data (2017 to current)

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# 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 |
| 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 |



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## 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 |
| 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 |



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# 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 |
| 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 |



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# 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 |
| 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 |



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# 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 |
| 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 |



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# 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 |
| 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 |



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## 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 |
| 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 |



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## 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 |



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## 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 |



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# 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 |



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## 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 |



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## 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 |



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## 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 |



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# 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 | -- | -- | -- | -- | -- |



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# 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 | -- | -- | -- | -- | -- |



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## 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 | -- | -- | -- | -- | -- |



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# 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 | -- | -- | -- | -- | -- |



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## 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** |



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# 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 |



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# 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 | -- | -- | -- | -- | -- |



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# 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 | -- | -- | -- | -- | -- |



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# 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 | -- | -- | -- | -- | -- |



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## 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 | -- | -- | -- | -- | -- |



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# 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 | -- | -- | -- | -- | -- |



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# 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 | -- | -- | -- | -- | -- |



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## 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 | -- | -- | -- | -- | -- |



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## 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 |



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## 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 |



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# 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 |



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## 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 |



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## 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 |



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# 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 |



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# 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 |



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## 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 |



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## 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 |



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# 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 |



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# 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 |



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# 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 |



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## 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 |


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# APPENDIX G

## Trend Analysis Summary

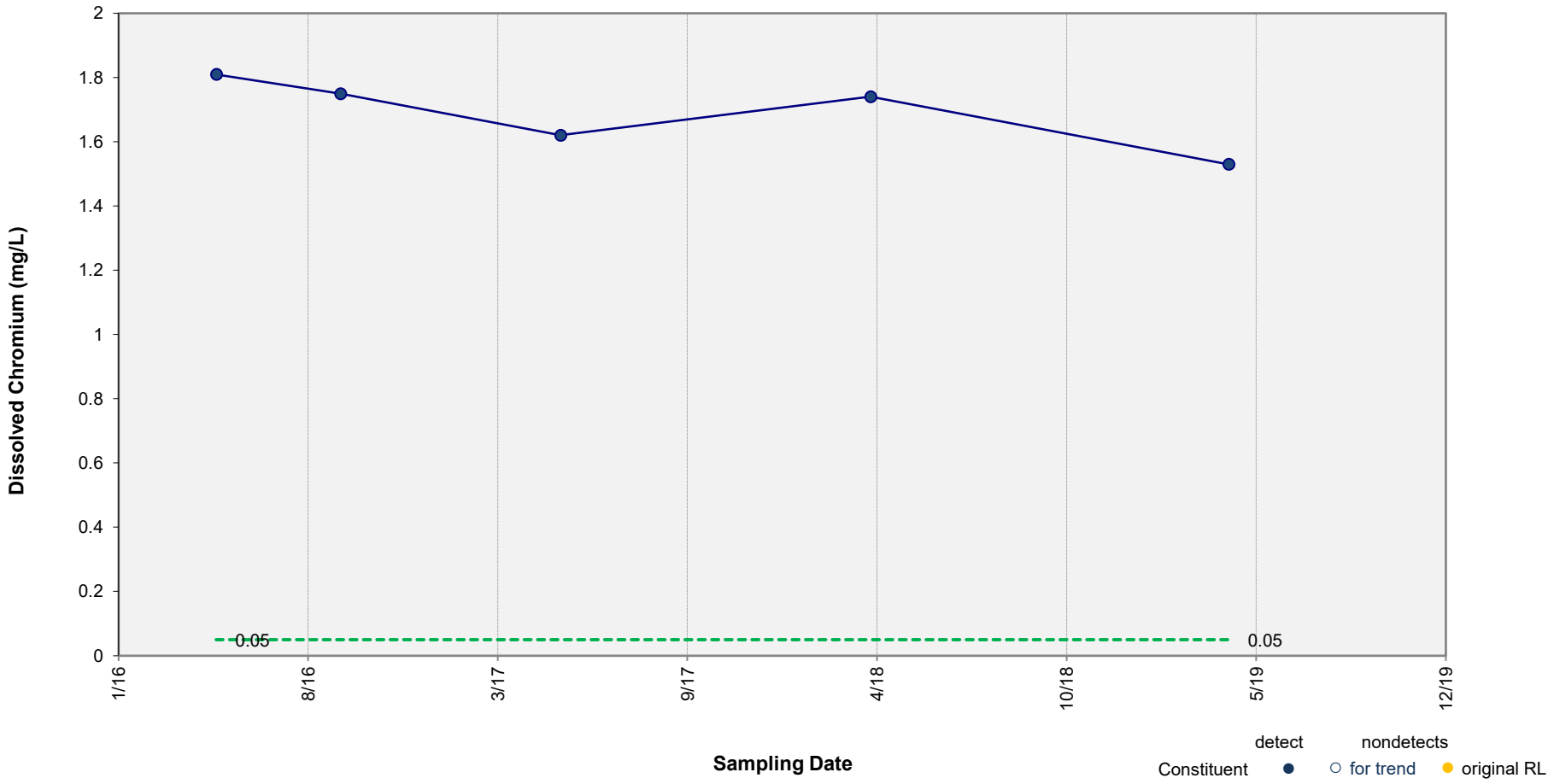
**Table G-1 - 2019 Mann-Kendall Analysis Summary**
**Former Eunice North Gas Plant, New Mexico**

| 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

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**Results of Mann-Kendall Test for Trend:** **DECREASING TREND**

p value = 0.042 Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW094**

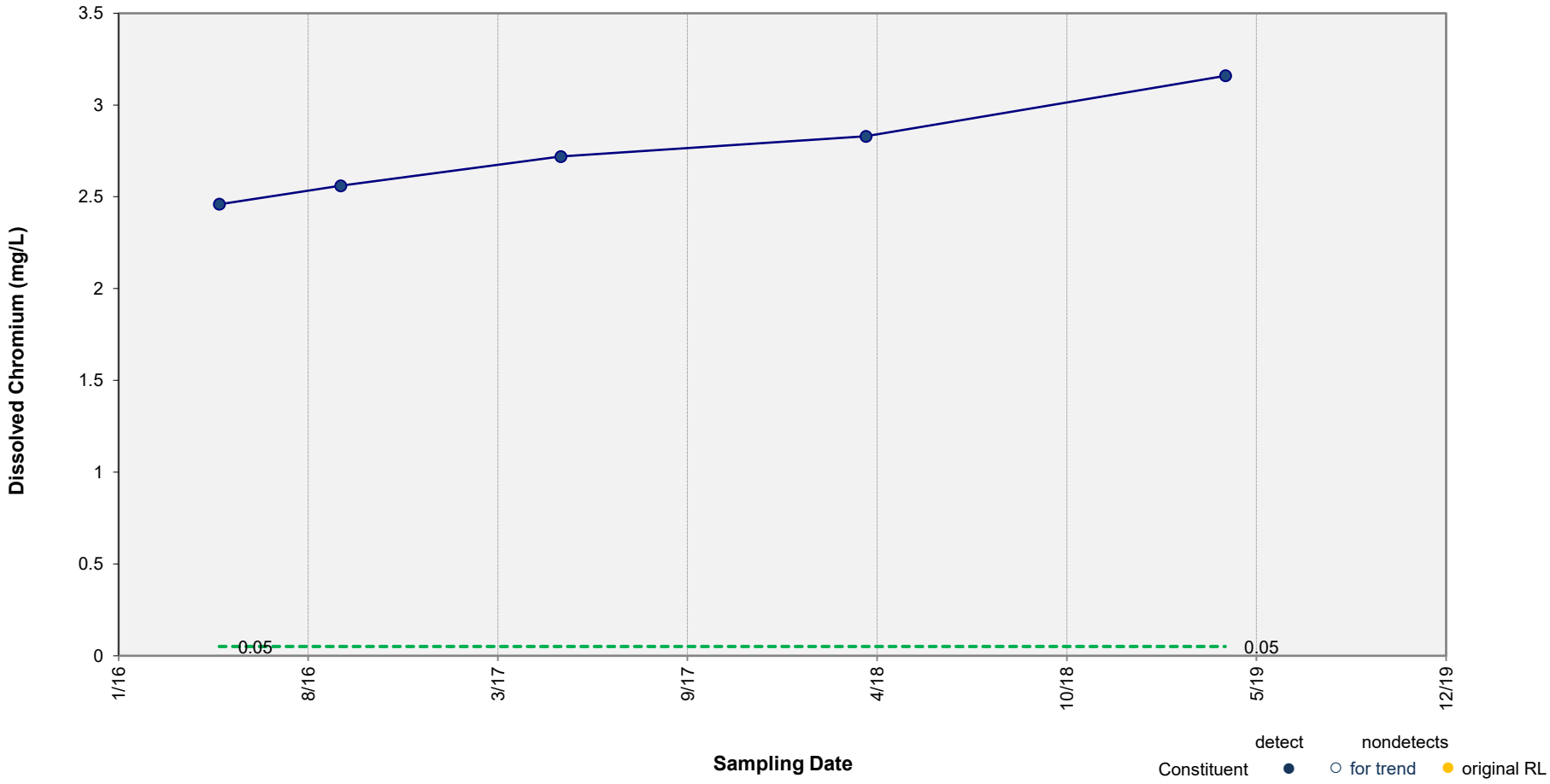
Eunice North, New Mexico

**Figure G-1**



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**Results of Mann-Kendall Test for Trend:** **INCREASING TREND**

p value = 0.008 Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW058**

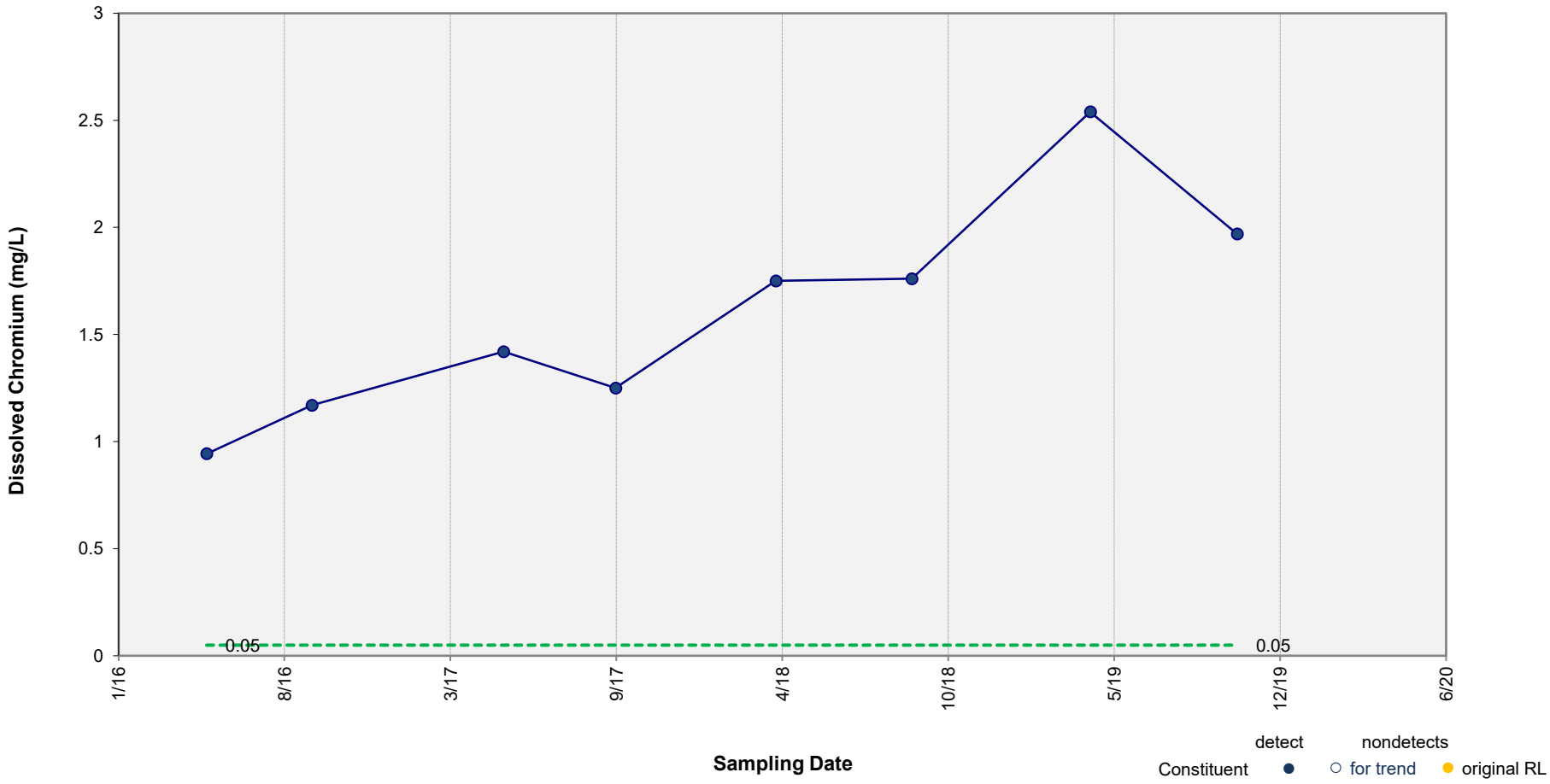
Eunice North, New Mexico

**Figure G-2**



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**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).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW013**

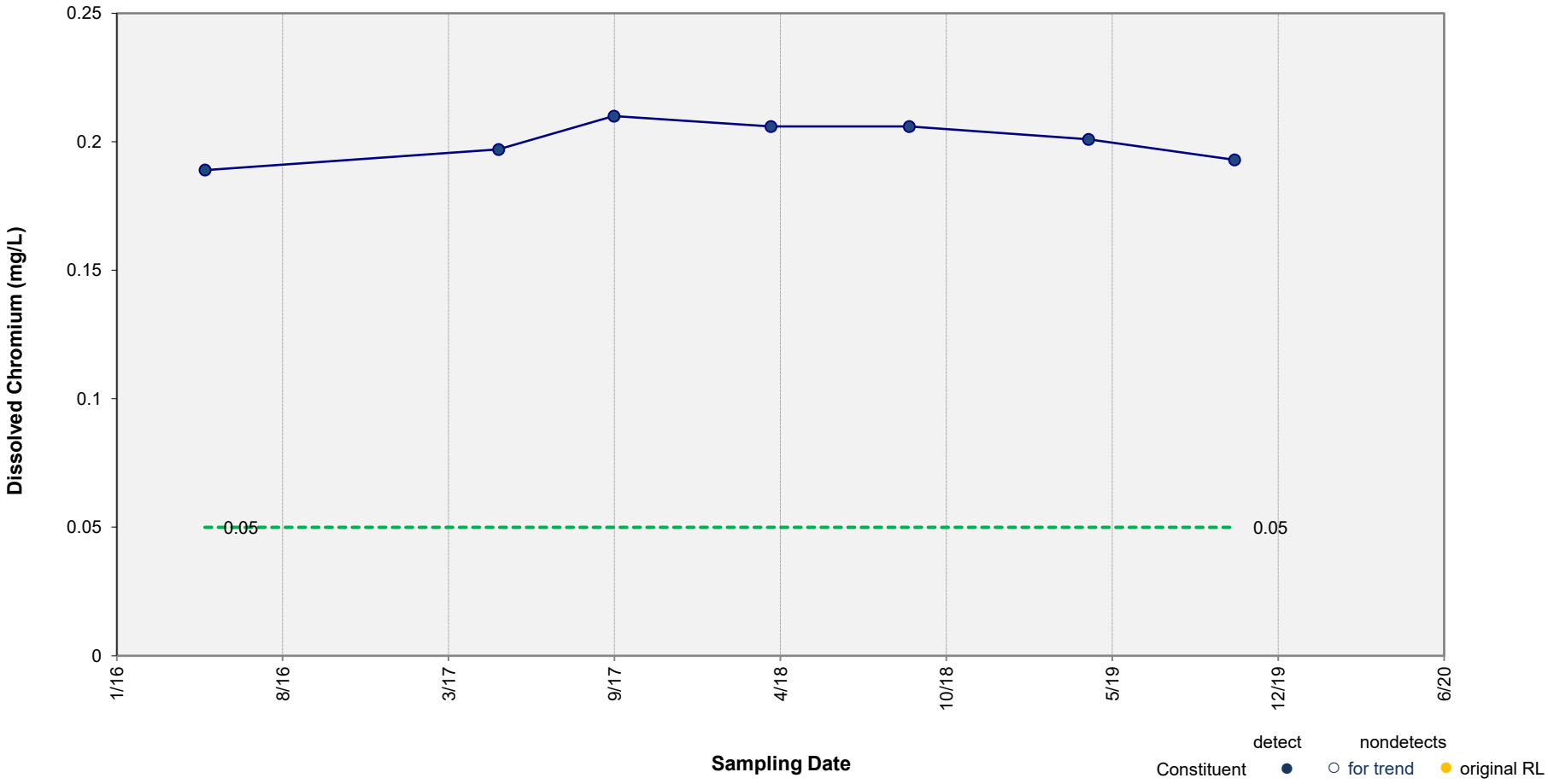
Eunice North, New Mexico

**Figure G-3**



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**Results of Mann-Kendall Test for Trend:** **No Significant Trend**

p value = 0.563 Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW041A**

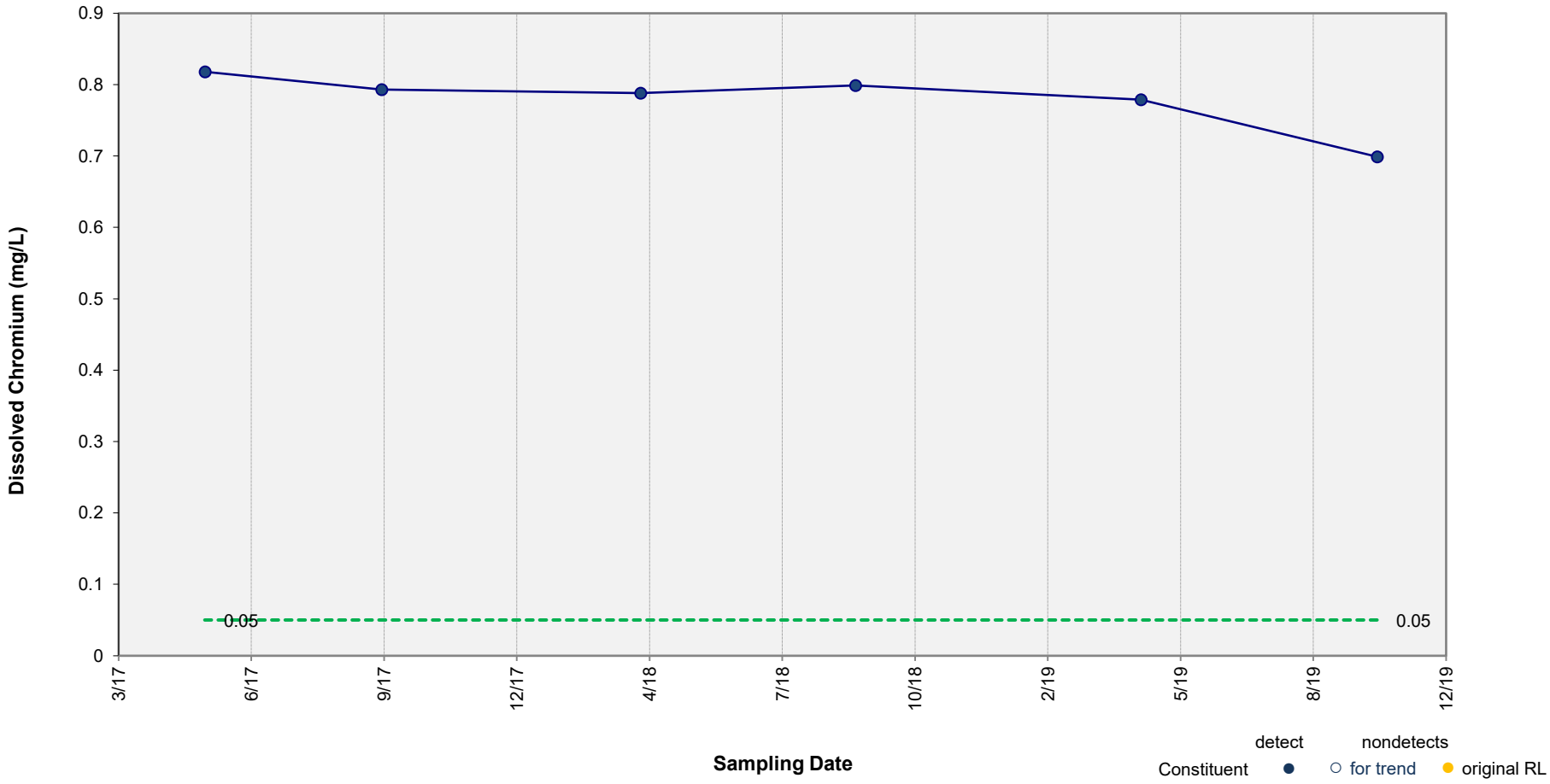
Eunice North, New Mexico

**Figure G-4**



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**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).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW051SA (since 2017)**

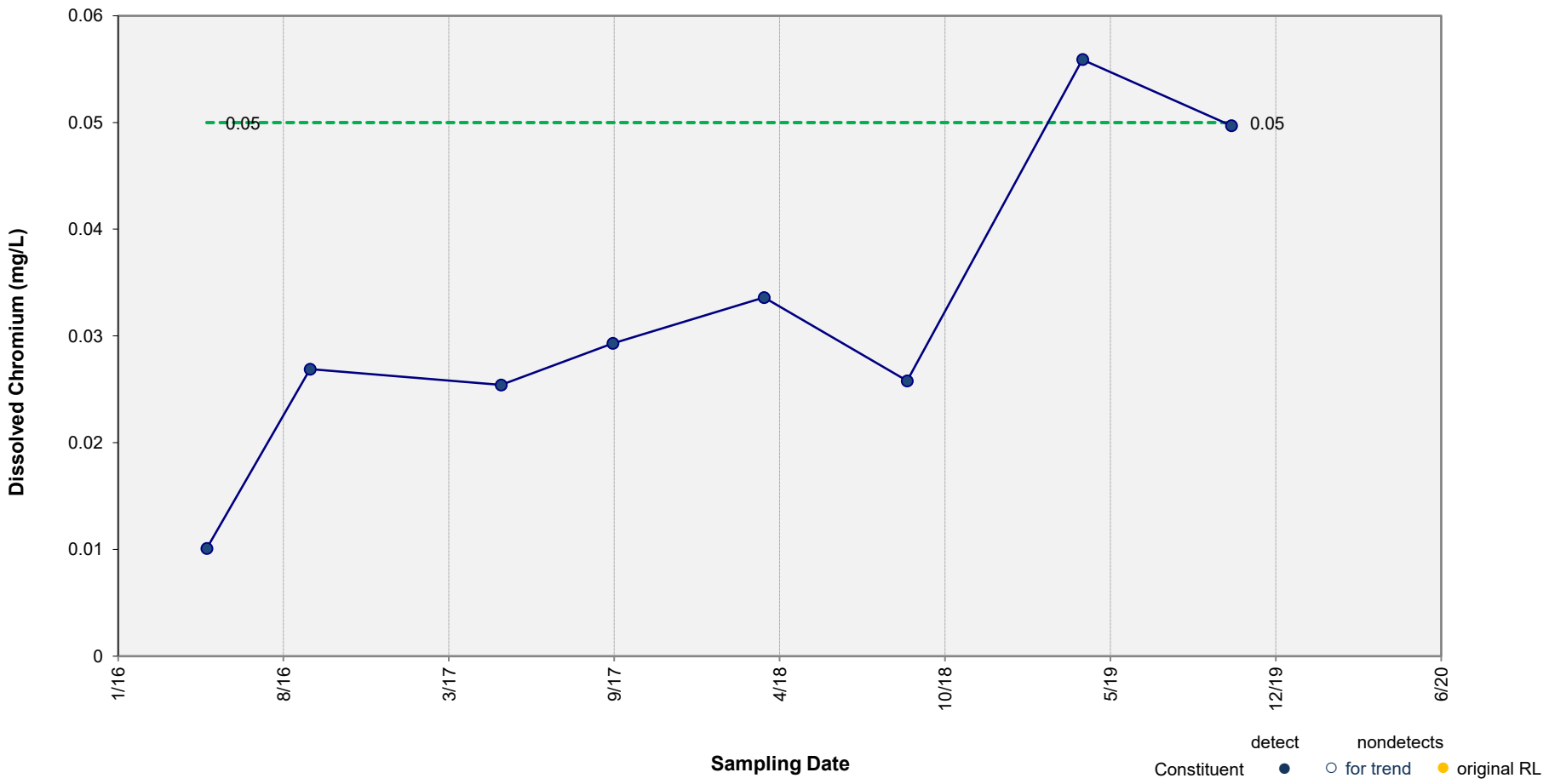
Eunice North, New Mexico

**Figure G-5**



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**Results of Mann-Kendall Test for Trend:** **INCREASING TREND**

p value = 0.016 Note: p value < 0.1 indicates a statistically significant trend (90% confidence level).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW085SA**

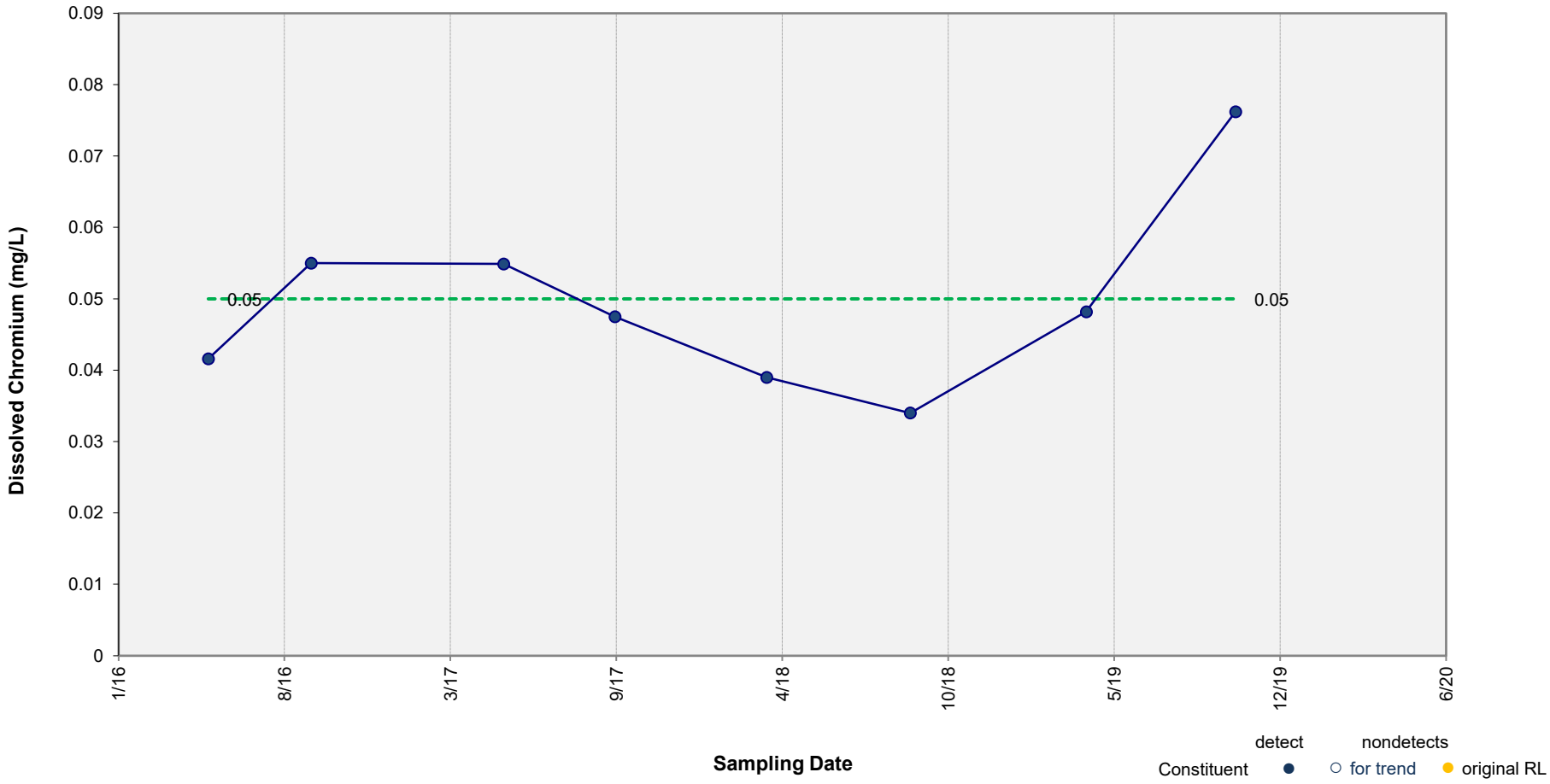
Eunice North, New Mexico

**Figure G-6**



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**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).

ARCADIS

**Concentration vs. Time Plot - Dissolved Chromium in MW086SA**

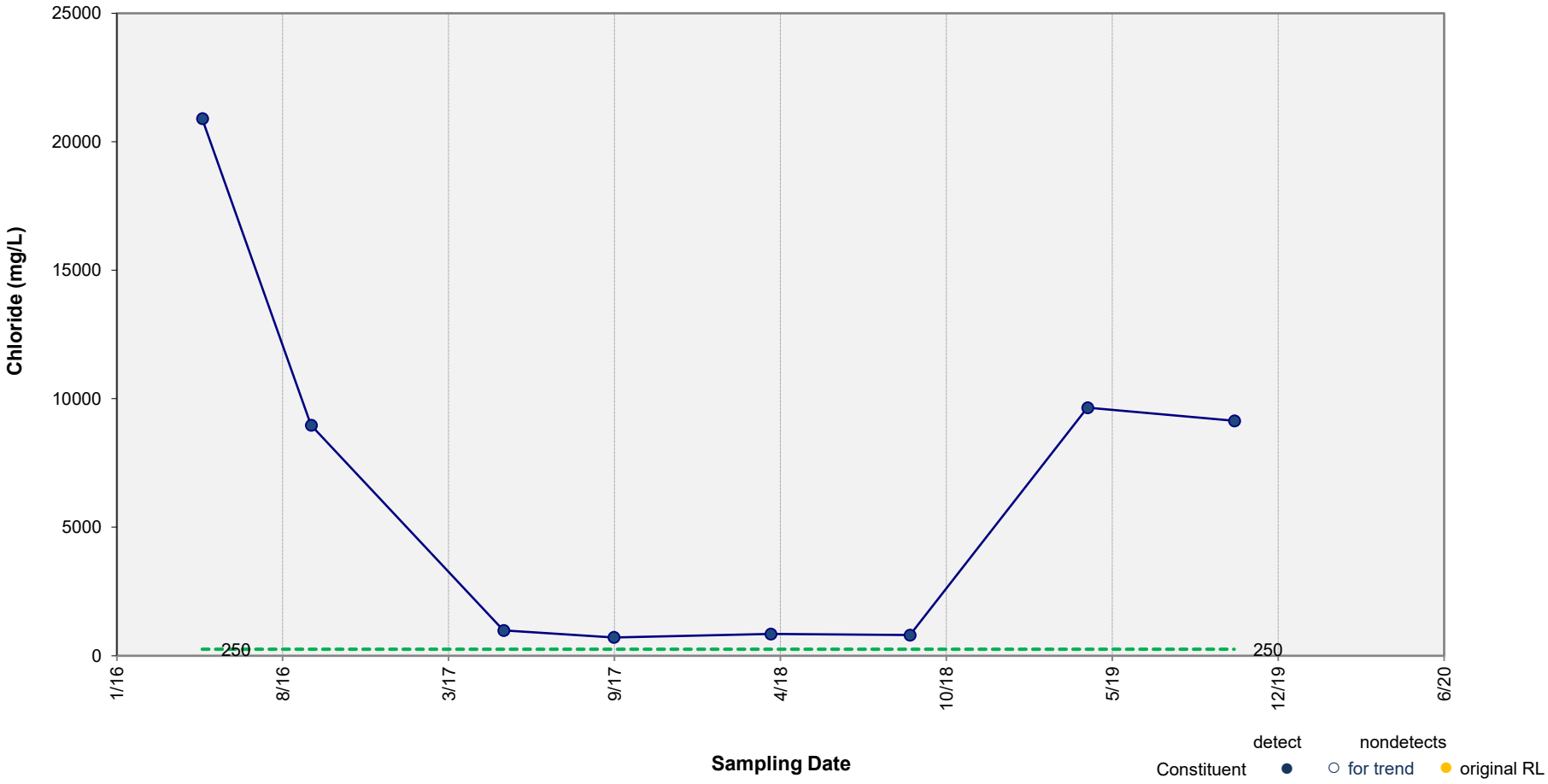
Eunice North, New Mexico

**Figure G-7**

MK Trends_MW086SA_Chromium_HS.xlsx

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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW069**

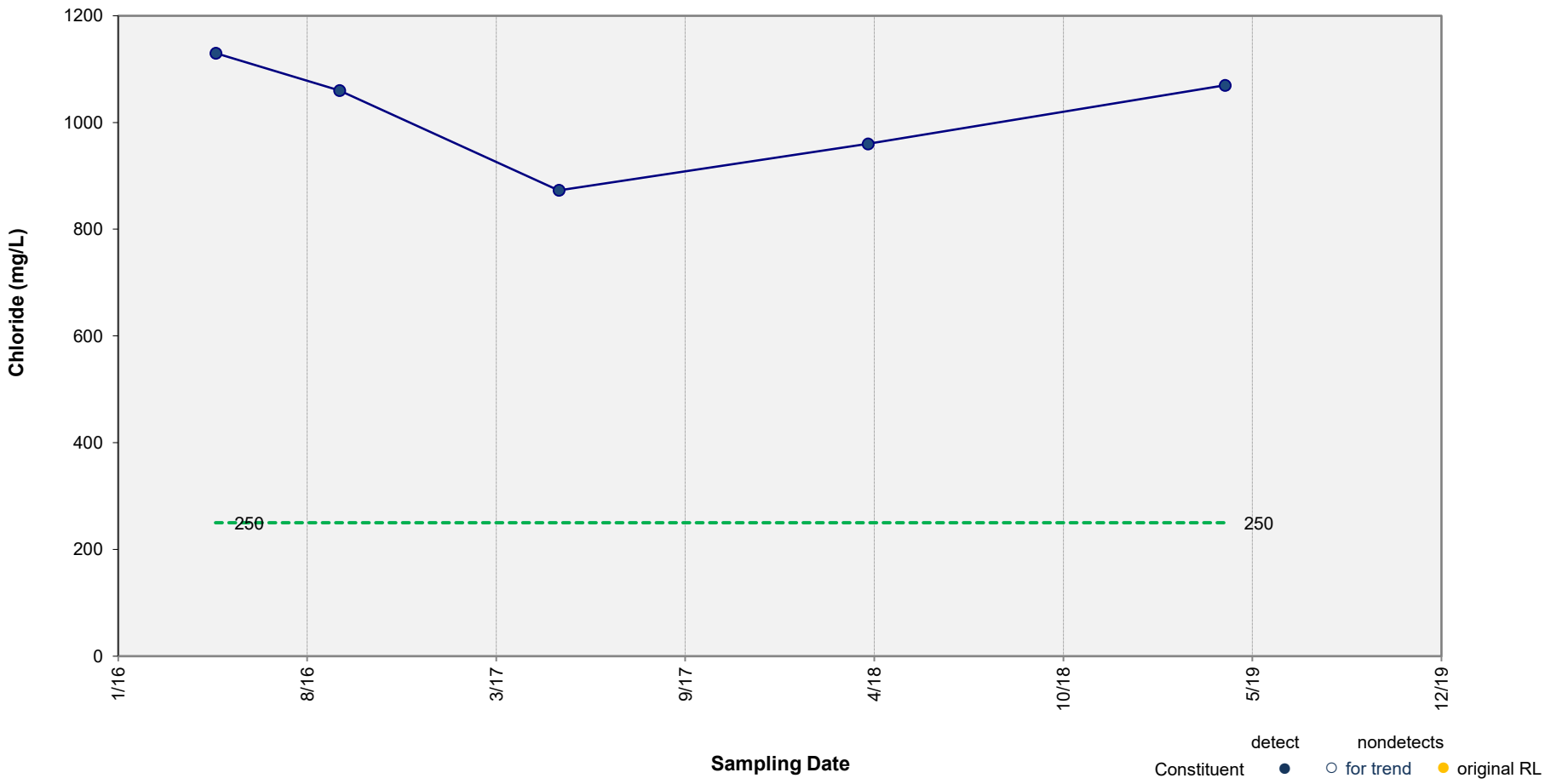
Eunice North, New Mexico

**Figure G-8**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW094**

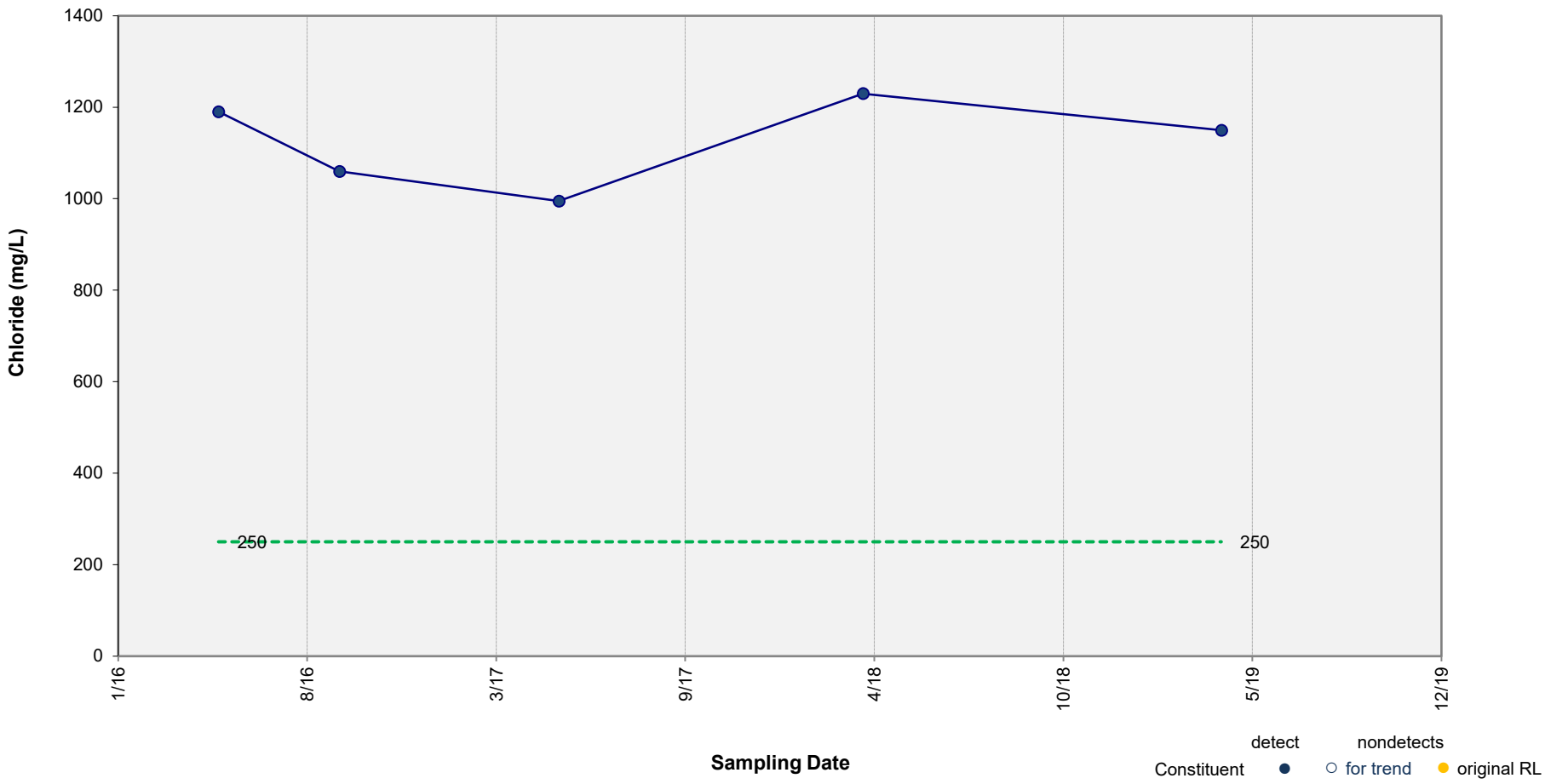
Eunice North, New Mexico

**Figure G-9**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW058**

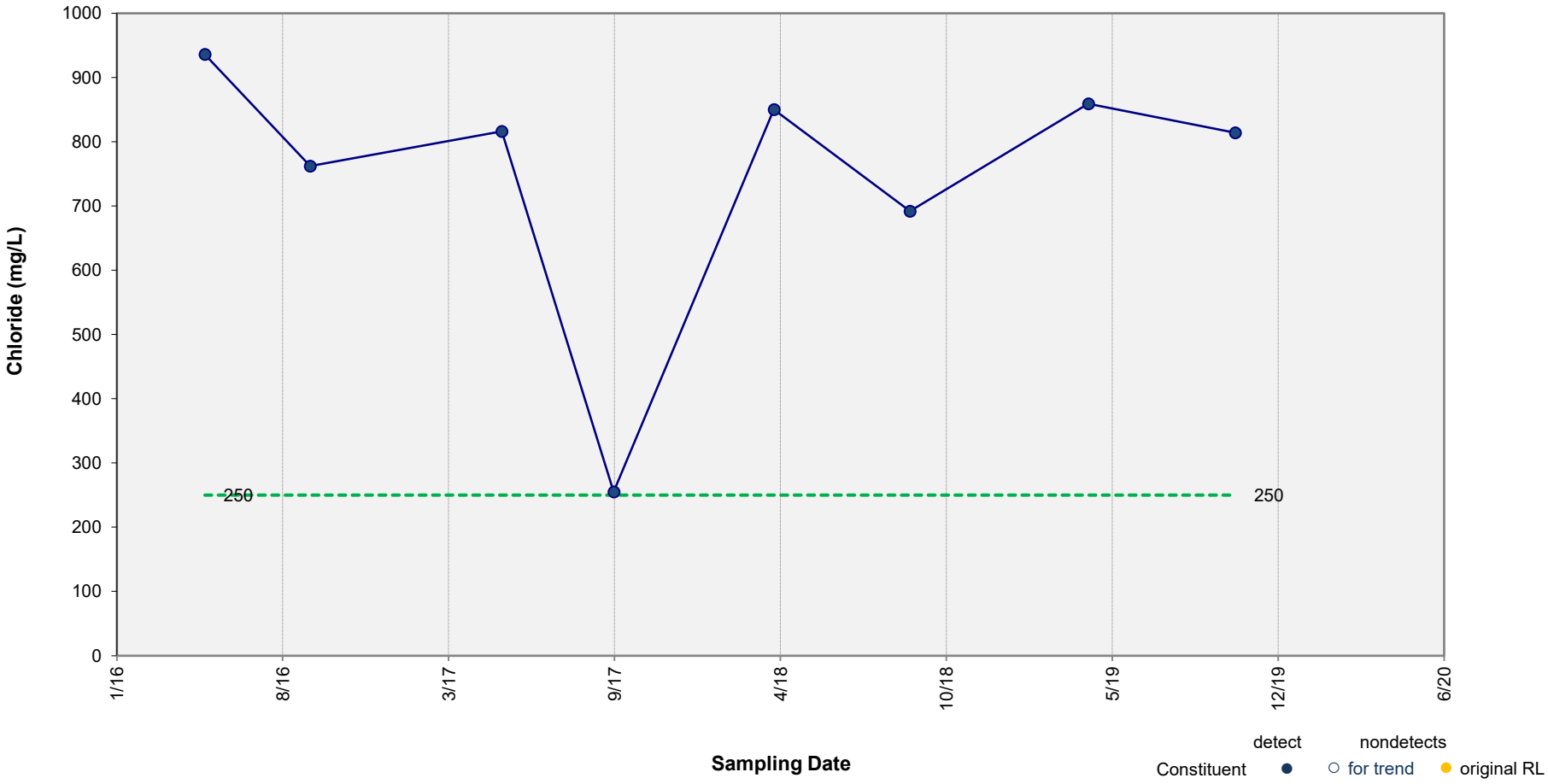
Eunice North, New Mexico

**Figure G-10**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW013**

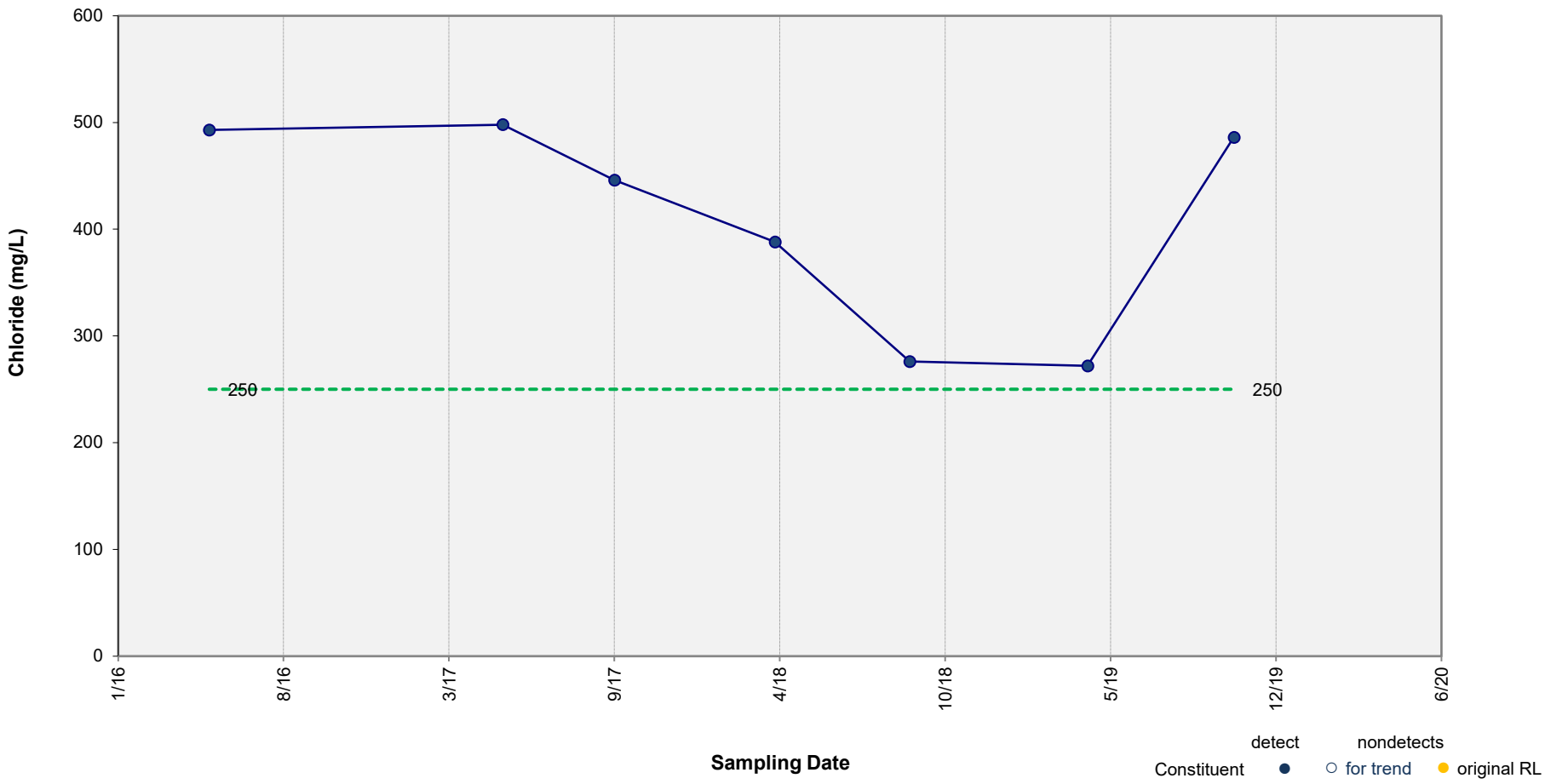
Eunice North, New Mexico

**Figure G-11**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW047**

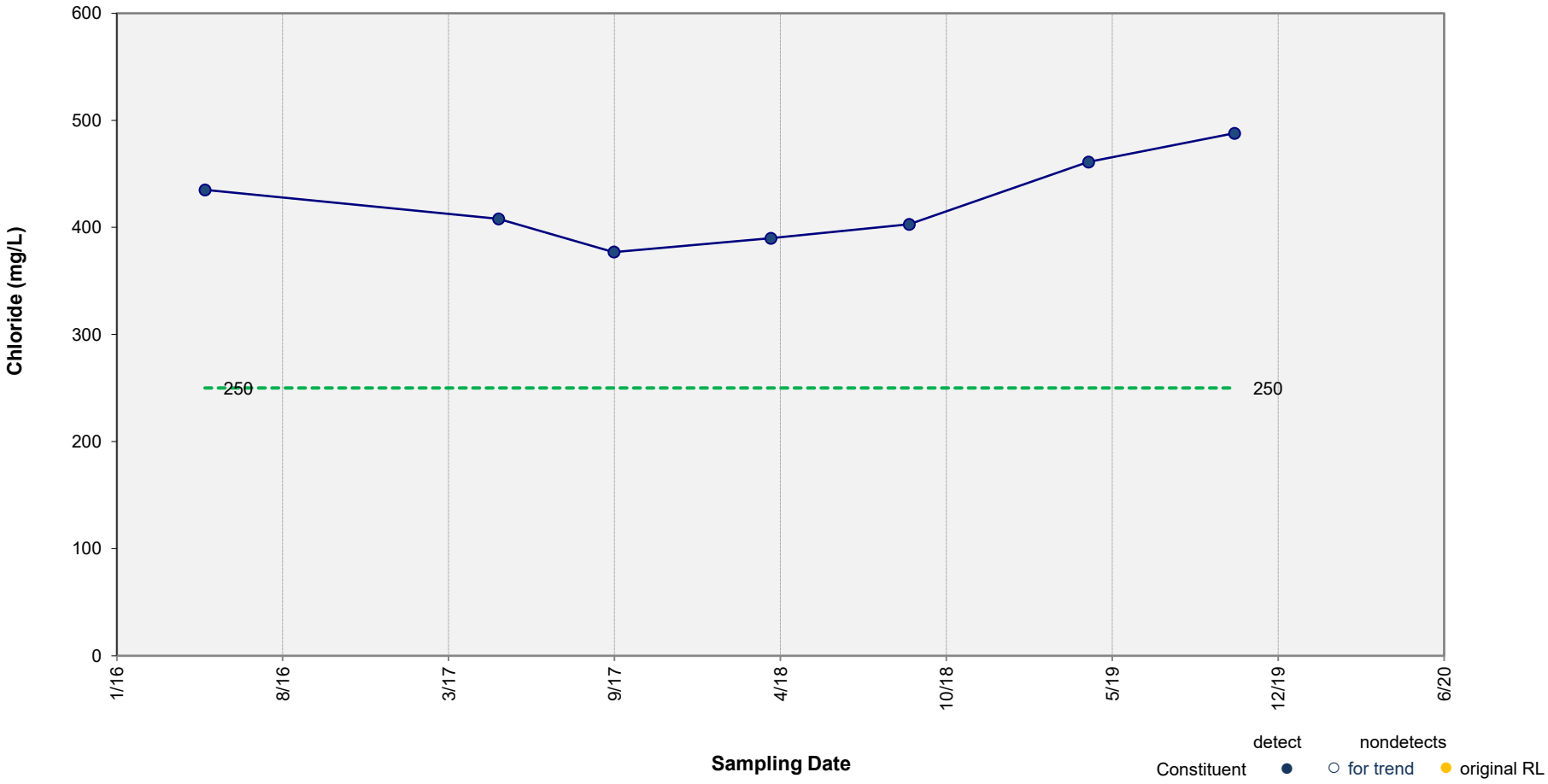
Eunice North, New Mexico

**Figure G-12**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW041A**

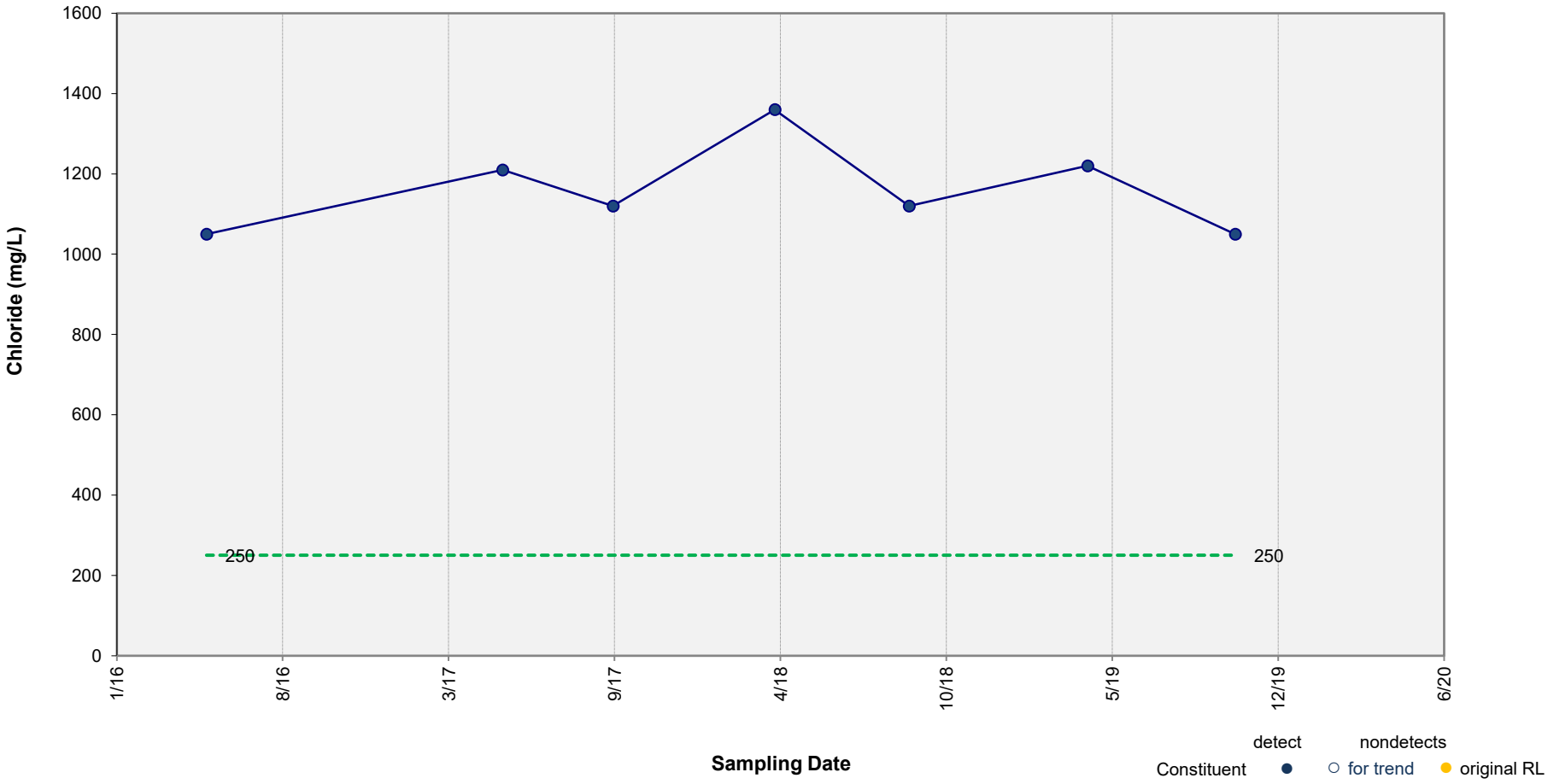
Eunice North, New Mexico

**Figure G-13**

MK Trends_MW041A_Chloride_HS.xlsx

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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW051SA**

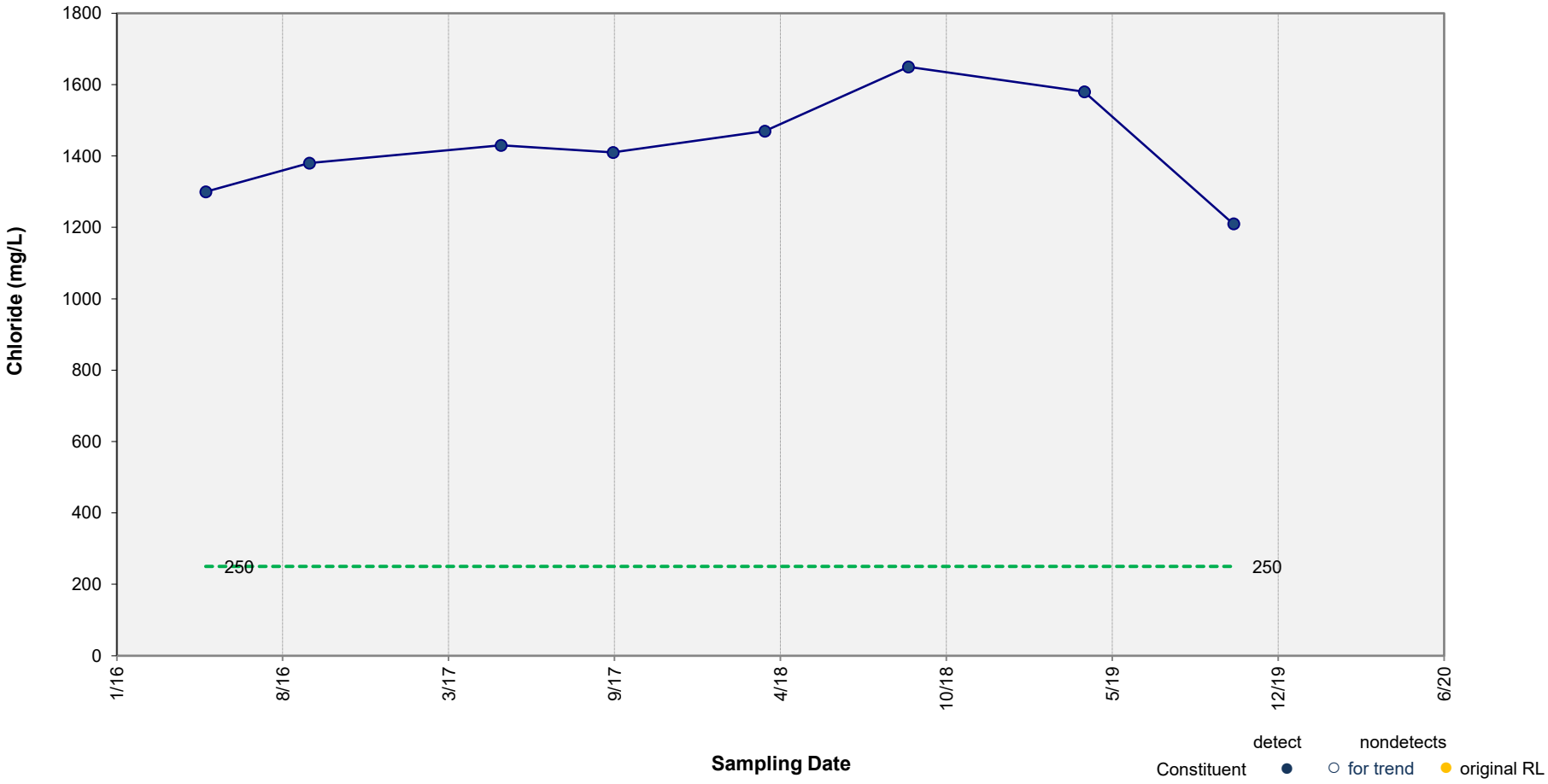
Eunice North

**Figure G-14**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW085SA**

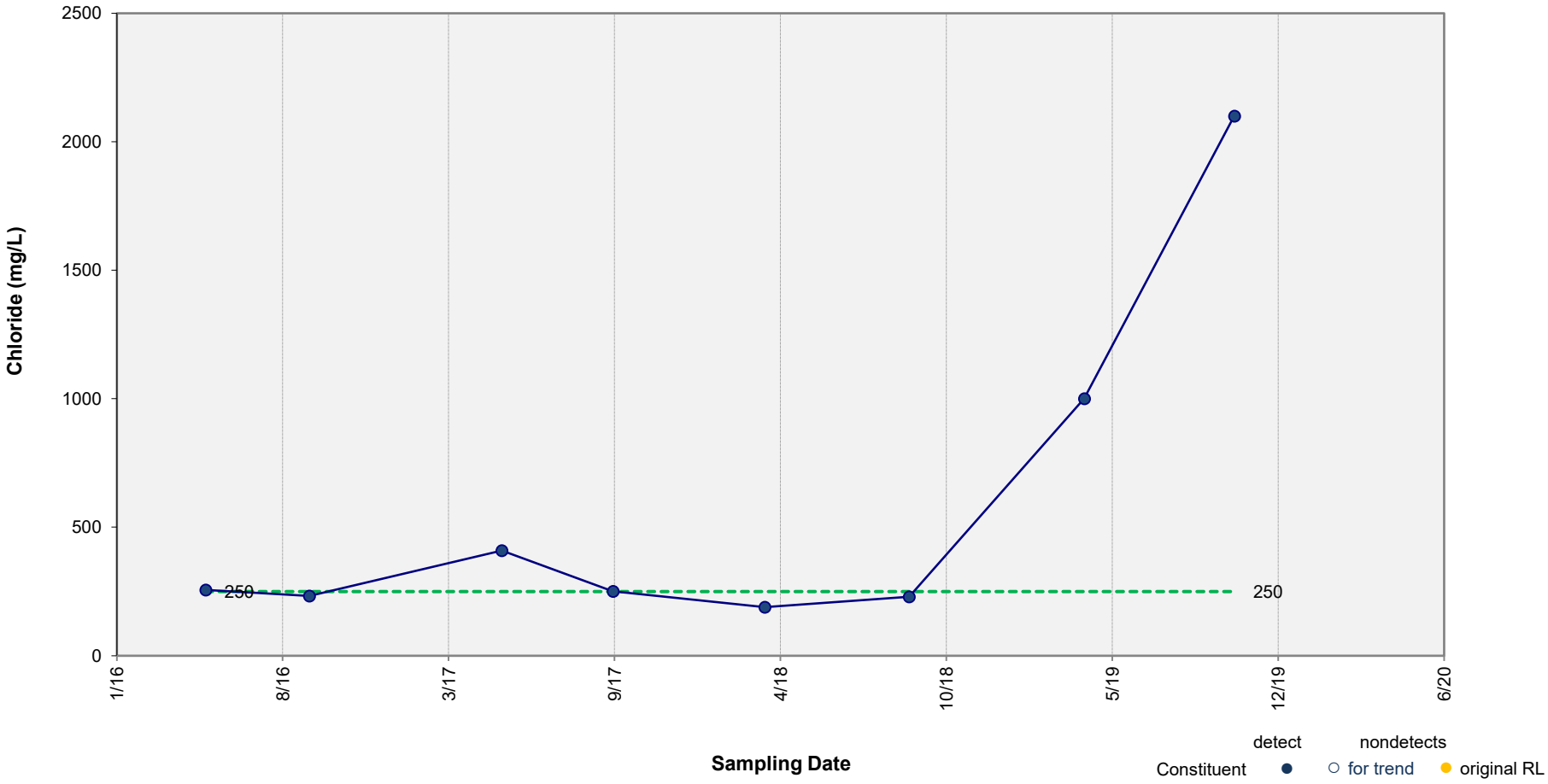
Eunice North, New Mexico

**Figure G-15**

MK Trends_MW085SA_Chloride_HS.xlsx

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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW073SA**

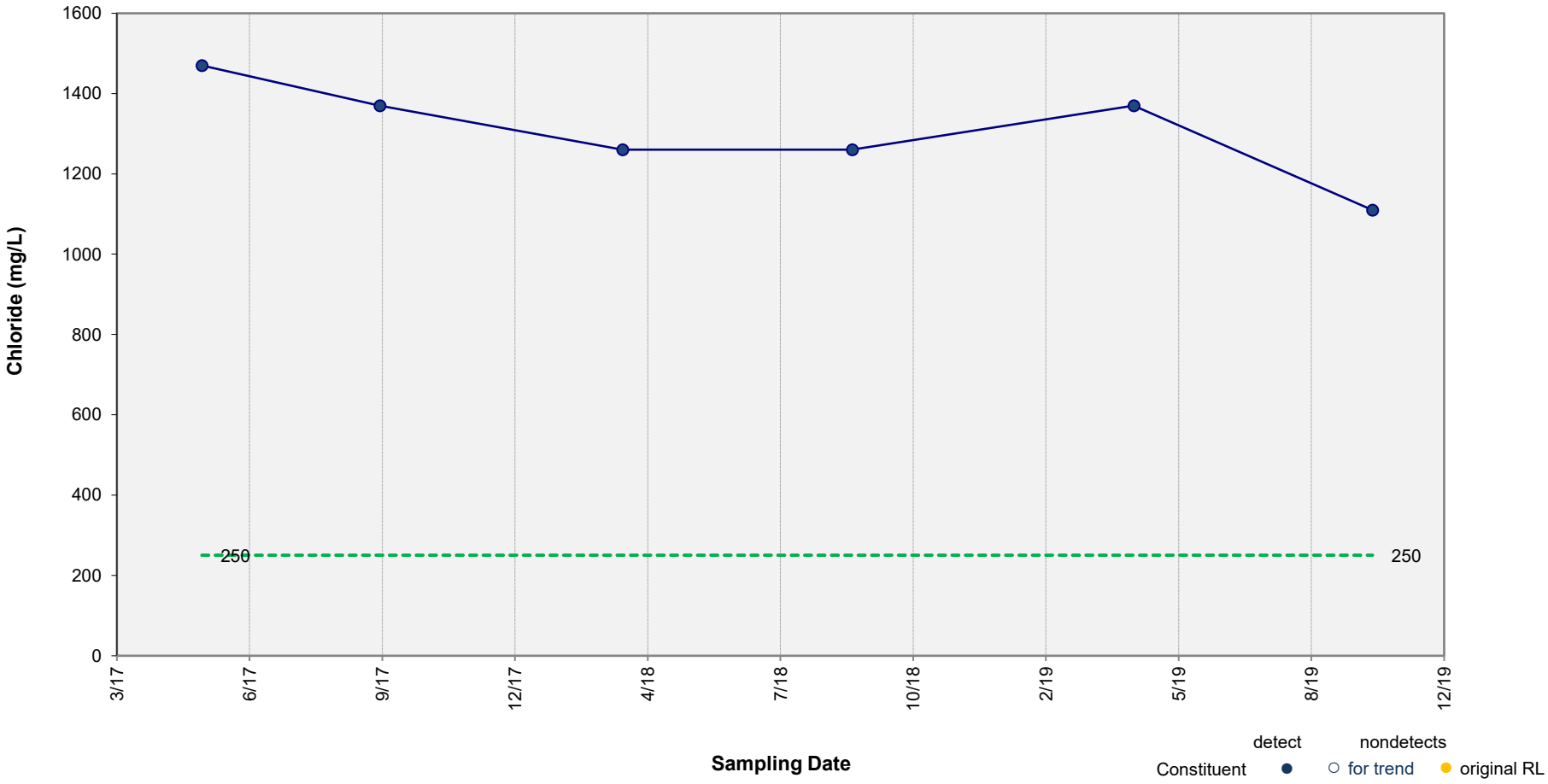
Eunice North, New Mexico

**Figure G-16**



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**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).

ARCADIS

**Concentration vs. Time Plot - Chloride in MW086SA (since 2017)**

Eunice North, New Mexico

**Figure G-17**



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LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- 2.54 TOTAL CHROMIUM CONCENTRATION/DUPLICATE RESULT IN MILLIGRAMS PER LITER (mg/L)
- TOTAL CHROMIUM ISOCONCENTRATION CONTOUR (mg/L; DASHED WHERE INFERRED)
  - >0.05
  - >0.5
  - >2
- J THE TARGET ANALYTE WAS POSITIVELY IDENTIFIED BELOW THE QUANTITATION LIMIT AND ABOVE THE DETECTION LIMIT
- <0.004 U NOT DETECTED ABOVE REPORTING LIMIT
- 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 8, 9, 10 AND 11 OCTOBER, 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.

- VARIABLE
- STABLE
- INCREASING
- DECREASING

CONTINENTAL ROAD

6th STREET

MAIN STREET (STATE LOOP 207)

AVENUE "R"

AVENUE "Q"

AVENUE "P"

AVENUE "O" (STATE HIGHWAY NO. 8)

20th STREET

19th STREET

18th STREET

17th STREET

16th STREET

15th STREET

N

0 300' 600'

GRAPHIC SCALE

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

# DISSOLVED CHROMIUM TREND SUMMARY MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE G-18

DW/GROUP: ENVCAD
C:\Users\nadigera\8191\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3006114\01-DWG\EUN Fig 7 DCIM Fall 2019.dwg LAYOUT: 7 SAVED: 2/14/2020 12:19 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/14/2020 12:23 PM BY: NADIGERA, CHIDAMBARA
XREFS: IMAGES: 05_32103826.jpg

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- WATER WELL
- GAS PLANT PROPERTY BOUNDARY / FENCE LINE
- WATER SUPPLY LINE
- 1670 CHLORIDE CONCENTRATION/DUPLICATE RESULT IN MILLIGRAMS PER LITER (mg/L)
- CHLORIDE ISOCONCENTRATION CONTOUR (mg/L; DASHED WHERE INFERRED)
  - >250
  - >500
  - >1,000
  - >3,000
- 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 8, 9 10 AND 11 OCTOBER, 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.

- NO TREND/VARIABLE
- STABLE
- POTENTIALLY INCREASING
- DECREASING

CONTINENTAL ROAD
6th STREET
AVENUE "R"
AVENUE "Q"
AVENUE "P"
AVENUE "O" (STATE HIGHWAY NO. 8)
20th STREET
19th STREET
18th STREET
17th STREET
16th STREET
15th STREET
MAIN STREET (STATE LOOP 207)
6th STREET
TEAGUE
WOODELLWW
LORDWW
ROLANDWW

N

0 300' 600'
GRAPHIC SCALE

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

# CHLORIDE TREND SUMMARY MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
G-19

DIV/GROUP: ENVCAD
C:\Users\chuliab4677\BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\Eunice North Gas Plant-Site O&M\2020\3000611401-DWG\EUN Fig 5 CIM Fall 2019.dwg LAYOUT: 5 SAVED: 2/21/2020 2:03 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 2/21/2020 2:11 PM BY: CHUTIA, BARAKHA
XREFS:
IMAGES:

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