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March 31, 2020

Mr. Bradford Billings
Environmental Bureau
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

**Re: Semi-Annual Groundwater Monitoring Report (July to December 2020)
Chevron Dollarhide Groundwater Remediation Site
Andrews County, Texas
RRC OCP No. 08-1048
NMOCD RP No. 1R-3944**

Dear Mr. Billings:

Chevron Environmental Management and Real Estate Company (CEMREC) submits herein to the Railroad Commission of Texas (RRC) the *Semi-Annual Groundwater Monitoring Report (July to December 2020)* for the Chevron Dollarhide Oil Field Unit located in Andrews County, Texas (Site). This report was prepared by GHD Services Inc. (GHD), on behalf of CEMREC, to document groundwater monitoring activities performed at the Site during the above referenced reporting period.

If you have any questions regarding this submittal, please contact me at (832) 854-5601 or Nick Casten of GHD at (225) 296-6513.

Respectfully,
**Chevron Environmental Management and Real Estate Company
on behalf of Chevron U.S.A. Inc.**

A handwritten signature in black ink that reads "Jason Michelson".

Jason Michelson

Encl.

cc: Kent Stallings – RRC Site Remediation Section
Nick Casten – GHD

Accepted - 10/25/2022

NV



Semi Annual Groundwater Monitoring Report (July to December 2020)

Dollarhide Oil Field Unit
Andrews County, Texas
RRC OCP No. 08-1048
OCD RP No. 1R -944

Chevron Environmental
Management and
Real Estate Company





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1. Introduction

GHD Services Inc. (GHD), on behalf of Chevron Environmental Management and Real Estate Company (CEMREC), submits herein to the Railroad Commission of Texas (RRC) the *Semi-Annual Groundwater Monitoring Report (July to December 2020)* for the Dollarhide Oil Field Unit located in Andrews County, Texas (Site). The latitude/longitude coordinates for the Site are 32° 08' 45.60" N and 103° 03' 20.12" W, and a vicinity map showing the Site location is included as Figure 1. This report presents a summary and evaluation of the annual groundwater monitoring data collected in the second half of 2020.

2. Background

It is believed that historical operations at the Site have contributed to elevated chloride concentrations in groundwater in the Ogallala Aquifer. The Site was discovered as an oil and gas production field in 1945 and, over the years, was owned and operated and/or leased by various companies that disposed of excess produced water and drilling fluids into pits. The use of pits for water disposal ceased in 1967, and the Site operators began using an injection system for disposal. In 1971, the first evidence of elevated chloride concentrations in groundwater was identified in Tract 26, and then in 1974 in Tract 45. Groundwater assessment was initiated in 1974, and groundwater recovery was initiated in 1994 by Union Oil Company of California (Unocal).

Representatives of Unocal and the RRC participated in a meeting on June 2, 1994, to discuss the installation of 24 recovery wells located in Texas along the Texas and New Mexico State Line to remove chloride-impacted groundwater from the Ogallala aquifer. Unocal received RRC approval of the recovery system in written correspondence on July 7, 1994. Since 1994, two additional recovery wells were installed, totaling 26 recovery wells that recovered groundwater from the Site. The recovered groundwater was pumped into two on-Site injection wells for oil reservoir pressure maintenance. Chevron Corporation purchased Unocal in August 2005. Since that time, Chevron U.S.A., Inc. (Chevron) continued to operate the groundwater recovery system until the system shutdown in November 2017, with concurrence from the RRC and New Mexico Oil Conservation Division (OCD).

Former Pits

Prior to the 1970s, it was an accepted practice in oil field operations to store produced water in pits adjacent to well locations. After livestock water wells in the vicinity of the Site began exhibiting elevated chloride concentrations, soil borings were installed in all former pit locations to assess possible chlorides in soil leaching to groundwater. Historical aerial photographs were reviewed to assess potential source areas. A 1955 aerial photograph identified the presence of approximately 84 former produced water (brine) pits adjacent to Site well locations. A large-scale evaporation pit located to the northwest of the existing gas plant that had been utilized to store mixed brine was identified as a potential source area. Soil samples were collected from various depths within the former pits and were submitted for laboratory analysis of chlorides. Former pit locations with soil chloride concentrations less than 700 parts per million (ppm) were determined not to be potential source areas and were left in place. The former pit locations with soil chloride concentrations



greater than 700 ppm were determined to be potential source areas, and Unocal capped the pits with a geosynthetic clay liner to prevent any further leaching of chlorides.

Light Non-Aqueous Phase Liquid

During a groundwater sampling event in January 2000, dissolved hydrocarbon constituents and light non-aqueous phase liquid (LNAPL) were detected in recovery well 44-J-WW during a routine groundwater sampling event. The LNAPL exhibited elevated concentrations of hydrocarbons in the C₆-C₁₂ range, indicative of natural gas liquids. A north-south trending underground pipeline that contains hydrocarbon products, operated by another company (not Chevron), is located within 100 feet of monitor well 44-J-WW. Soil investigations were conducted in 2000 by Unocal and 2011 by CEMREC, to determine the source area of the release; however, no hydrocarbon impacts were detected in soil. On November 5, 2010, LNAPL was discovered in two additional recovery wells, 44-I-WW and 44-II-WW, during routine operation and maintenance. Due to the presence of LNAPL, these three wells remained inactive through November 2017, when the groundwater recovery system was shut down to prevent the introduction of LNAPL into the groundwater recovery system. The LNAPL identified in these three wells (44-J-WW, 44-I-WW, and 44-II-WW) is not located near any Chevron assets that contain hydrocarbons, and the LNAPL is believed to be associated with other third-party pipelines in the vicinity. LNAPL investigation efforts have been summarized in previous reports that have been submitted to the RRC.

3. Regulatory Framework

The RRC has regulatory jurisdiction over oil and gas production operations in the State of Texas. CEMREC has been working under the guidance of the RRC to address the groundwater chloride impacts as a result of historic operations at the Site. Under the RRC, the Site is regulated under Title 16 of the Texas Administrative Code (TAC) Chapter 3 (relating to the Oil and Gas Division) Rule §3.8(b) (Statewide Rule 8 Water Protection).

On October 13, 2015, representatives of the OCD and CEMREC participated in a meeting at the OCD office in Santa Fe, New Mexico, to discuss the installation of groundwater monitor wells on CEMREC-owned property in New Mexico to delineate and to further assess the impacts to the Site's groundwater with respect to chlorides and total dissolved solids (TDS). Subsequent to the meeting, CEMREC submitted a Release Notification and Corrective Action (C-141) Form in a written correspondence on October 28, 2015, per OCD's request, in order to establish a file for the Site. Following the 2015 meeting with the OCD, CEMREC completed groundwater investigations in 2015, 2016, and 2017 that included installation of monitor wells in Texas and New Mexico to further delineate the plume boundary.

On May 16, 2017, representatives from CEMREC and GHD met with the RRC and the OCD at their respective offices. The meeting was held via teleconference to provide a project status update to both regulatory agencies and to ensure that the regulatory agencies involved in the project are in alignment with the path forward for the Site. During the joint regulatory meeting, the current and future use of the recovery system was discussed. CEMREC informed the RRC and OCD of its intentions to temporarily shut down the groundwater recovery system in the fourth quarter of 2017, for at least one calendar year, to evaluate non-pumping aquifer and plume conditions. The RRC



and OCD agreed with this approach and the groundwater recovery system was shut down in November 2017.

4. Groundwater Recovery

In the fourth quarter of 2018, representatives from CEMREC and GHD met with the RRC (November 28, 2018) and the OCD (December 13, 2018) at their respective offices. The purpose of these meetings was to provide a project status update to both regulatory agencies and discuss the path forward for the Site. During both 2018 regulatory meetings, CEMREC informed the RRC and the OCD of its intentions to permanently shut down the groundwater recovery system. The RRC and OCD both agreed with this approach, and the groundwater recovery system will remain permanently shut down.

5. Groundwater Monitoring

Groundwater sampling was initiated in 2008 at the Site on a semi-annual basis. In 2017, CEMREC initiated quarterly groundwater sampling to provide concentration data trends. Currently, groundwater monitoring at the Site is being performed on a quarterly basis, with events conducted in January, April, July, and October. The groundwater monitoring system consists of 67 monitor wells and 8 non-remedial wells screened in the Ogallala Aquifer approximately 120 feet below ground surface. Groundwater well designations are shown on Figure 2 and listed in Table 1. During the January and July events, all viable wells in the groundwater monitoring system are sampled. During the voluntary April and October events, only the wells installed during the 2015, 2016, 2017, 2019, and 2020 groundwater investigations are sampled to develop concentration trends over time. The groundwater data collected during the July and October 2020 events are discussed below.

5.1 Potentiometric Conditions

Prior to sampling during each event, depth-to-groundwater measurements were collected at each well with an oil/water interface probe, with an accuracy of 0.01 foot, to determine the groundwater elevation in each well. Groundwater potentiometric elevations and contours for the July and October 2020 events are shown on Figures 3 and 4, respectively. The measurements indicate that the groundwater flow direction is generally to the southwest which is consistent with previous events. A summary of the depth-to-groundwater measurements and the corresponding groundwater elevations is included in Tables 2 and 3. Historical groundwater elevations are included in Appendix A.

5.2 Groundwater Sampling

During the July and October 2020 sampling events, investigative groundwater samples were collected via no-purge grab sampling techniques. The groundwater samples were collected directly from the screened interval of each well using a HydraSleeve. The HydraSleeve is deployed during the gauging event to allow the well to return to equilibrium prior to sampling. Groundwater samples were collected in laboratory-supplied containers, preserved on ice, and transported to Xenco Laboratories located in Midland, Texas, following proper chain-of-custody procedures. All



groundwater samples were submitted for analysis of chloride by United States Environmental Protection Agency (EPA) Method 300/300.1 and TDS by EPA Method SM2540C. The results received from Xenco Laboratories for the July and October 2020 sampling events are reported herein.

5.3 Analytical Results

Groundwater sample analytical results were compared to the Texas Commission of Environmental Quality (TCEQ) Secondary Drinking Water Standards and Secondary Constituent levels for chlorides (300 milligrams per liter [mg/L]) and TDS (1,000 mg/L). The groundwater sample analytical results from the July and October 2020 events are listed in Table 4. The groundwater chloride and TDS concentrations and isopleths for the July and October 2020 sampling events are shown on Figures 5 through 8, and the analytical laboratory reports are included in Appendix B. The concentrations of chlorides and TDS are generally consistent with historical events. The chloride plume has been fully delineated in the downgradient direction in both Texas and New Mexico following the installation of the 2020 monitor wells. A table of historical analytical results is included in Appendix C.

5.4 Quality Assurance/Quality Control

During the July and October 2020 sampling events, four field duplicate sample sets were collected for chloride and TDS during each sampling event to confirm sample quality and reproducibility. No significant deviations were encountered in the sample results for duplicate constituents. All certified groundwater laboratory reports received during the July and October 2020 sampling events were reviewed by a GHD analytical chemist for laboratory and field method quality assurance/quality control (QA/QC). All laboratory reports were approved, and the associated data validation reports issued by GHD are included in Appendix D.

6. Conclusions and Path Forward

The results of the 2020 groundwater monitoring events will be used to update the groundwater model and to continue development for the strategy and path forward for the Site. CEMREC will continue conducting quarterly monitoring only for the monitor wells recently installed in 2019 and 2020 in order to establish concentration trends over time. Monitor wells installed prior to 2019 will continue to be sampled semi-annually.

Should you have any questions regarding this submittal, please contact Nick G. Casten of GHD at (225) 296-6513 or Jason Michelson of CEMREC at (832) 854-5601.

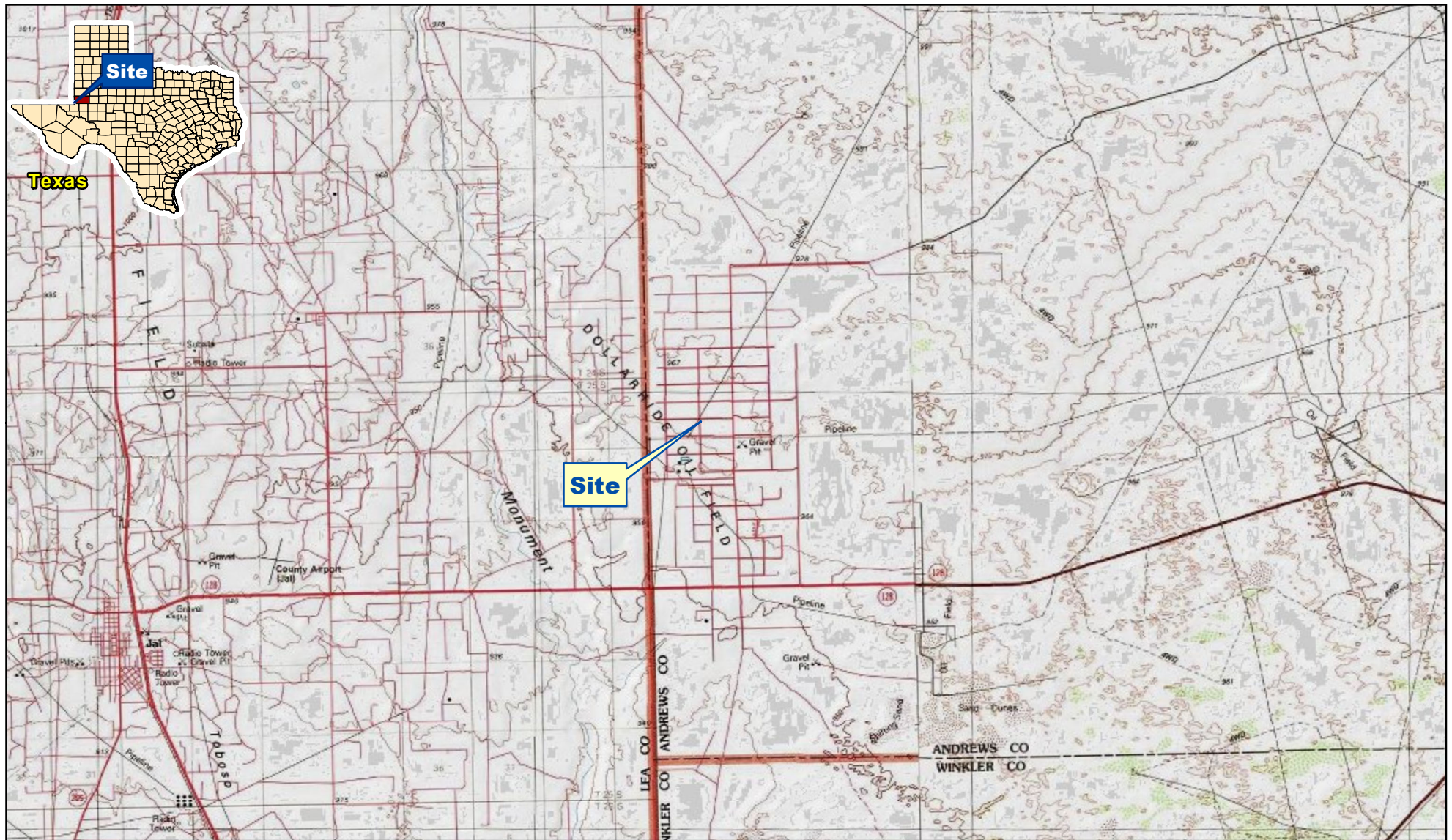
All of which is Respectfully Submitted
GHD,

A handwritten signature in black ink that reads "Nicholas G. Casten".

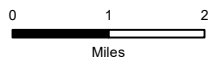
Nicholas G. Casten

A handwritten signature in blue ink that reads "Brian L. Carter".

Brian L. Carter, PhD
Texas PG No. 10319



Source: USGS 7.5 Minute Topographic Maps.



Coordinate System:
NAD 1983 UTM Zone 13N

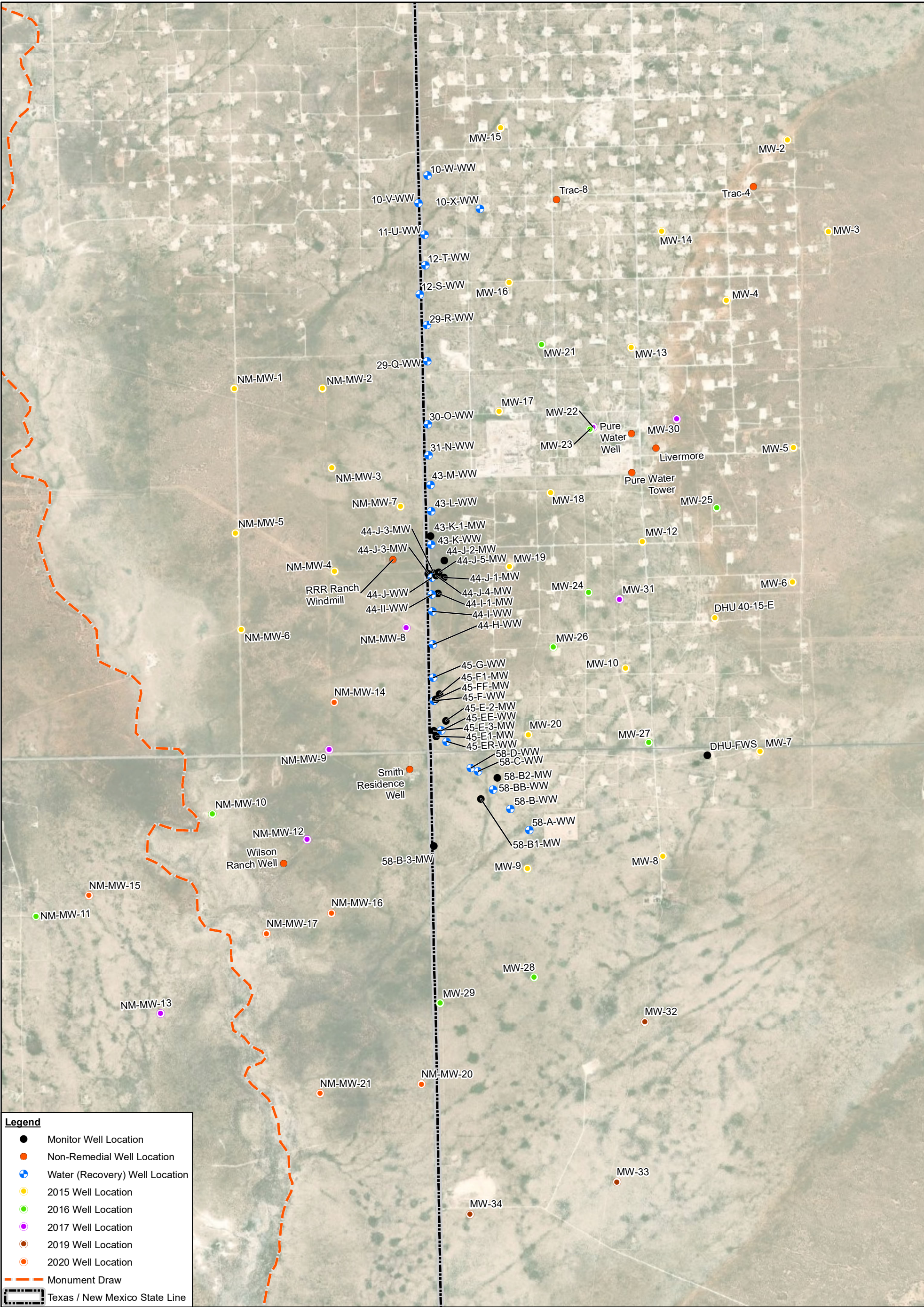


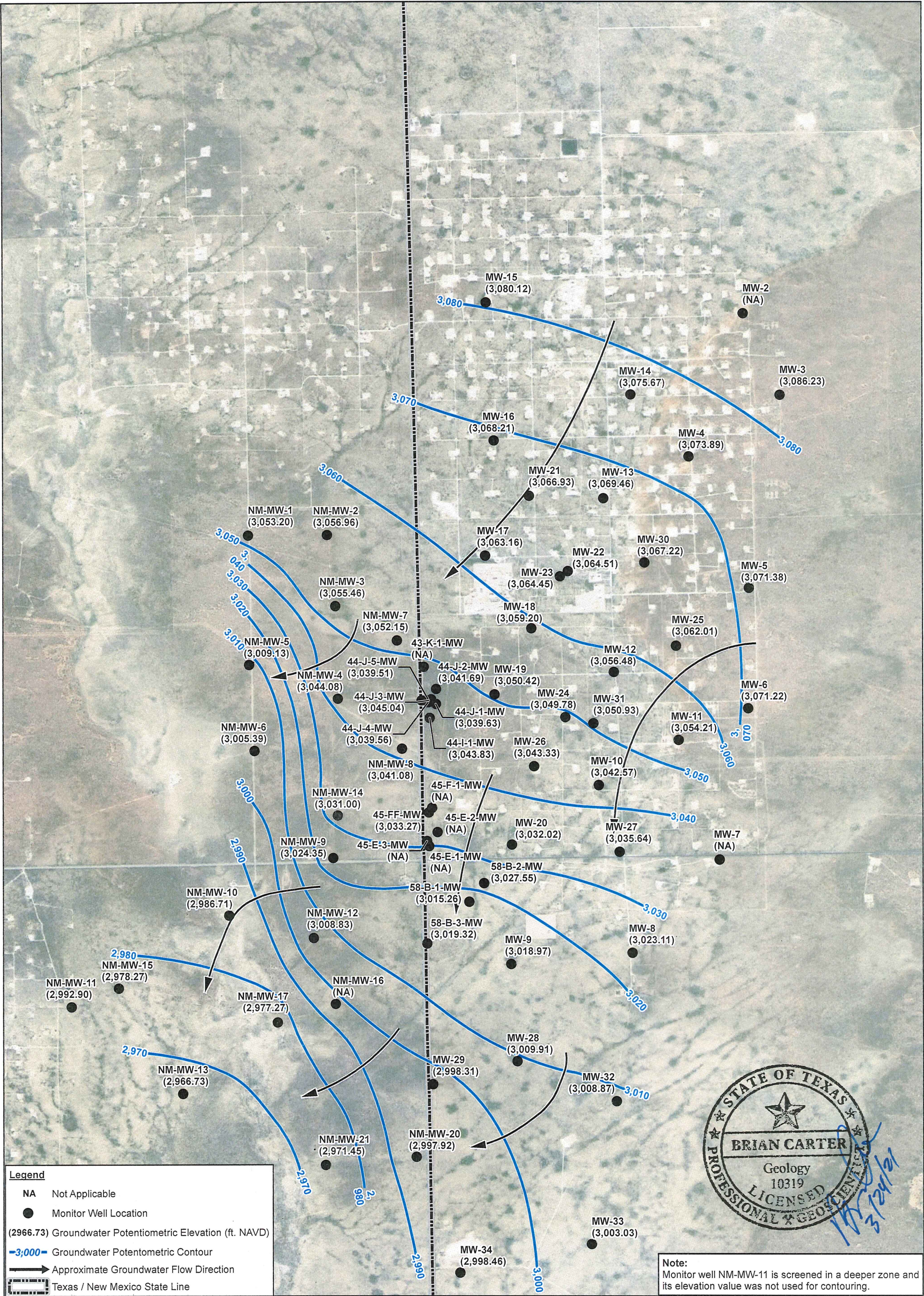
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
CHEVRON DOLLARHIDE UNIT

SITE VICINITY MAP

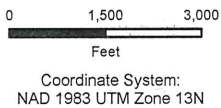
055270
Jun 30, 2020

FIGURE 1





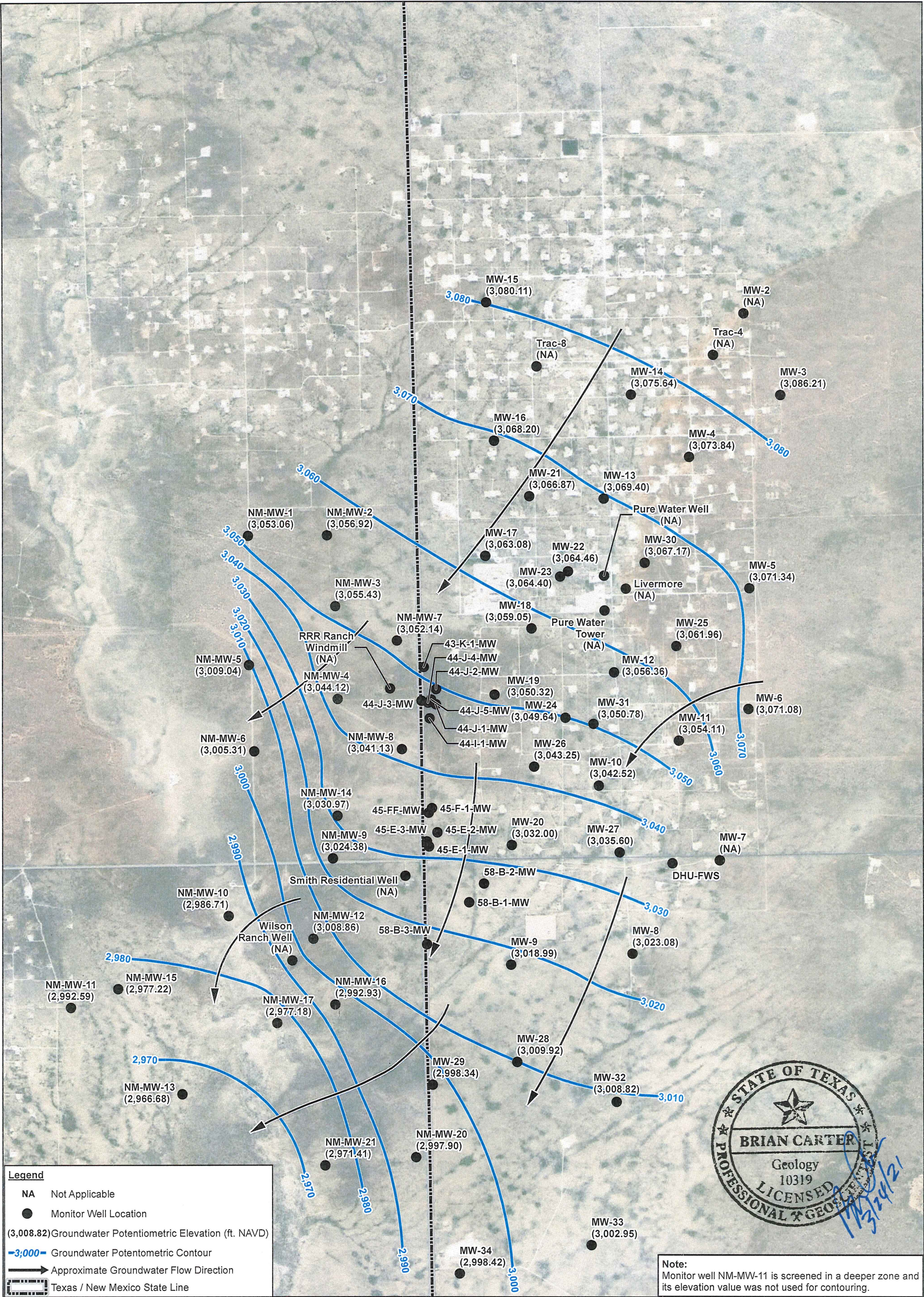
Source: ESRI World Imagery Basemap Service.



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
JULY 2020 GROUNDWATER POTENTIOMETRIC
ELEVATIONS & CONTOURS

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Mar 9, 2021

FIGURE 3



Source: ESRI World Imagery Basemap Service.

0 1,500 3,000
Feet

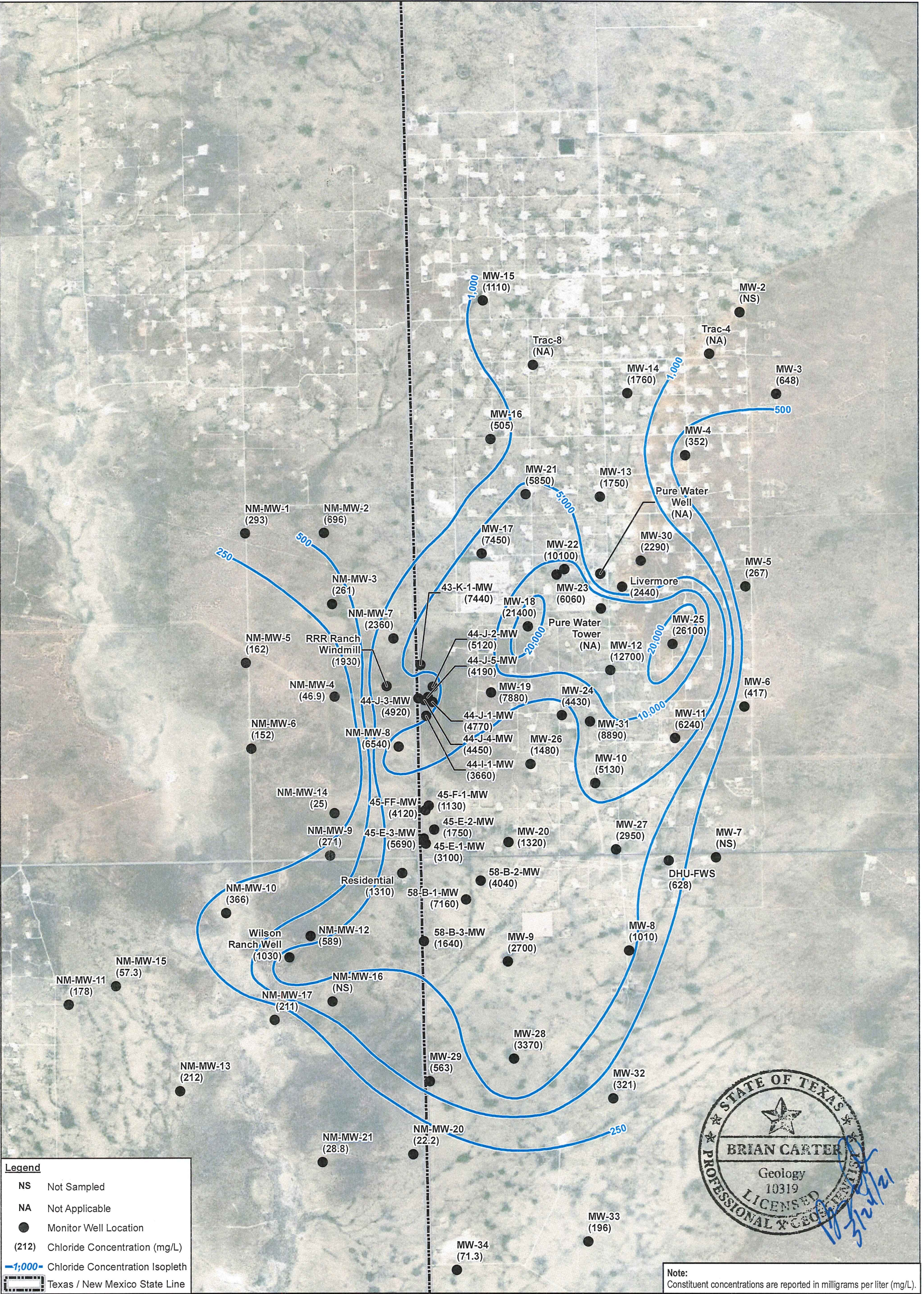
Coordinate System:
NAD 1983 UTM Zone 13N



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
OCTOBER 2020 GROUNDWATER POTENTIOMETRIC
ELEVATIONS & CONTOURS

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Mar 9, 2021

FIGURE 4



Source: ESRI World Imagery Basemap Service.

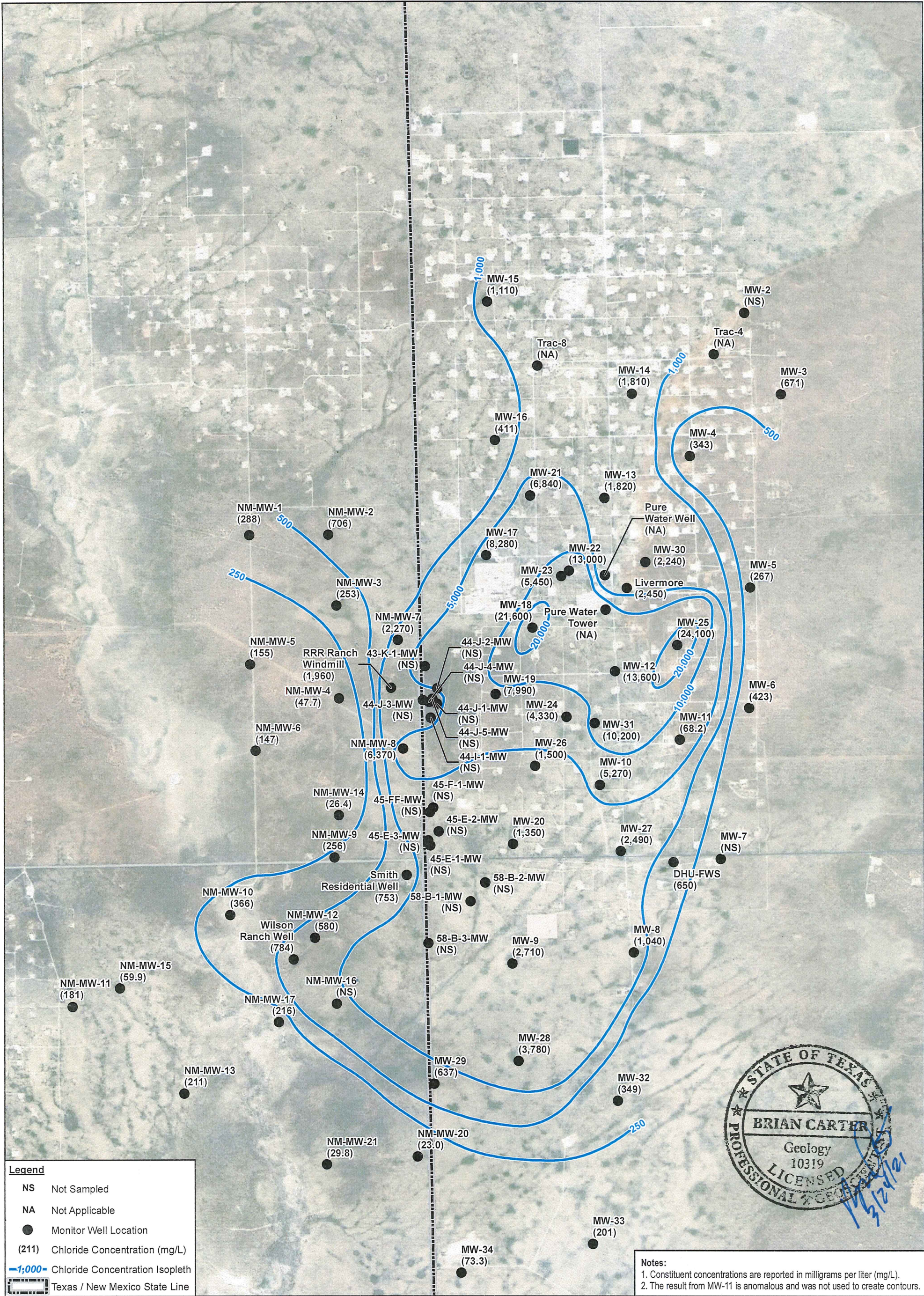
0 1,500 3,000
Feet
Coordinate System:
NAD 1983 UTM Zone 13N



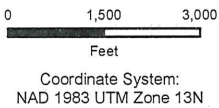
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
JULY 2020 GROUNDWATER CHLORIDE
CONCENTRATIONS & ISOPLETHS

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Mar 10, 2021

FIGURE 5



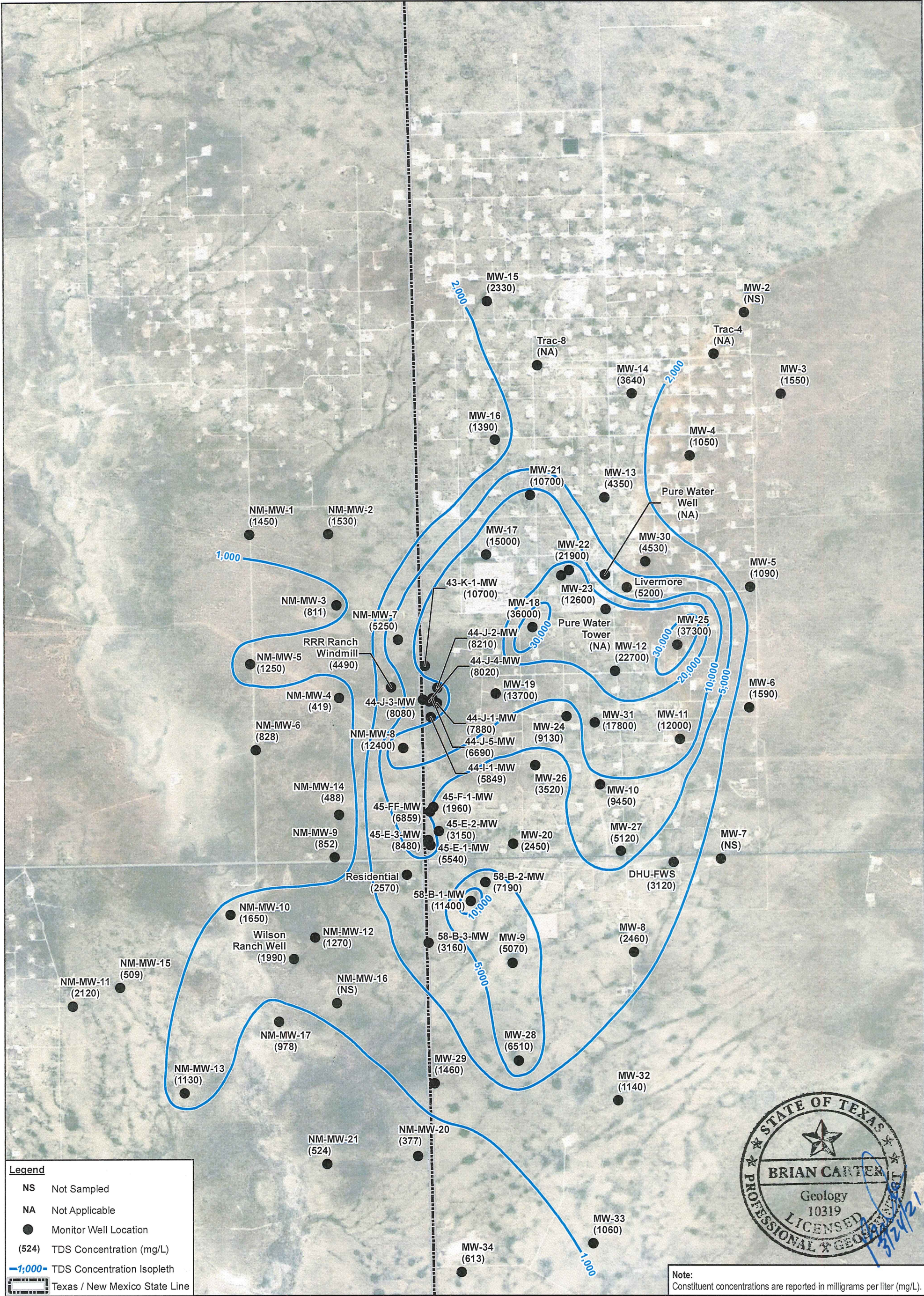
Source: ESRI World Imagery Basemap Service.



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
OCTOBER 2020 GROUNDWATER CHLORIDE
CONCENTRATIONS & ISOPLETHS

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Mar 10, 2021

FIGURE 6



Source: ESRI World Imagery Basemap Service.

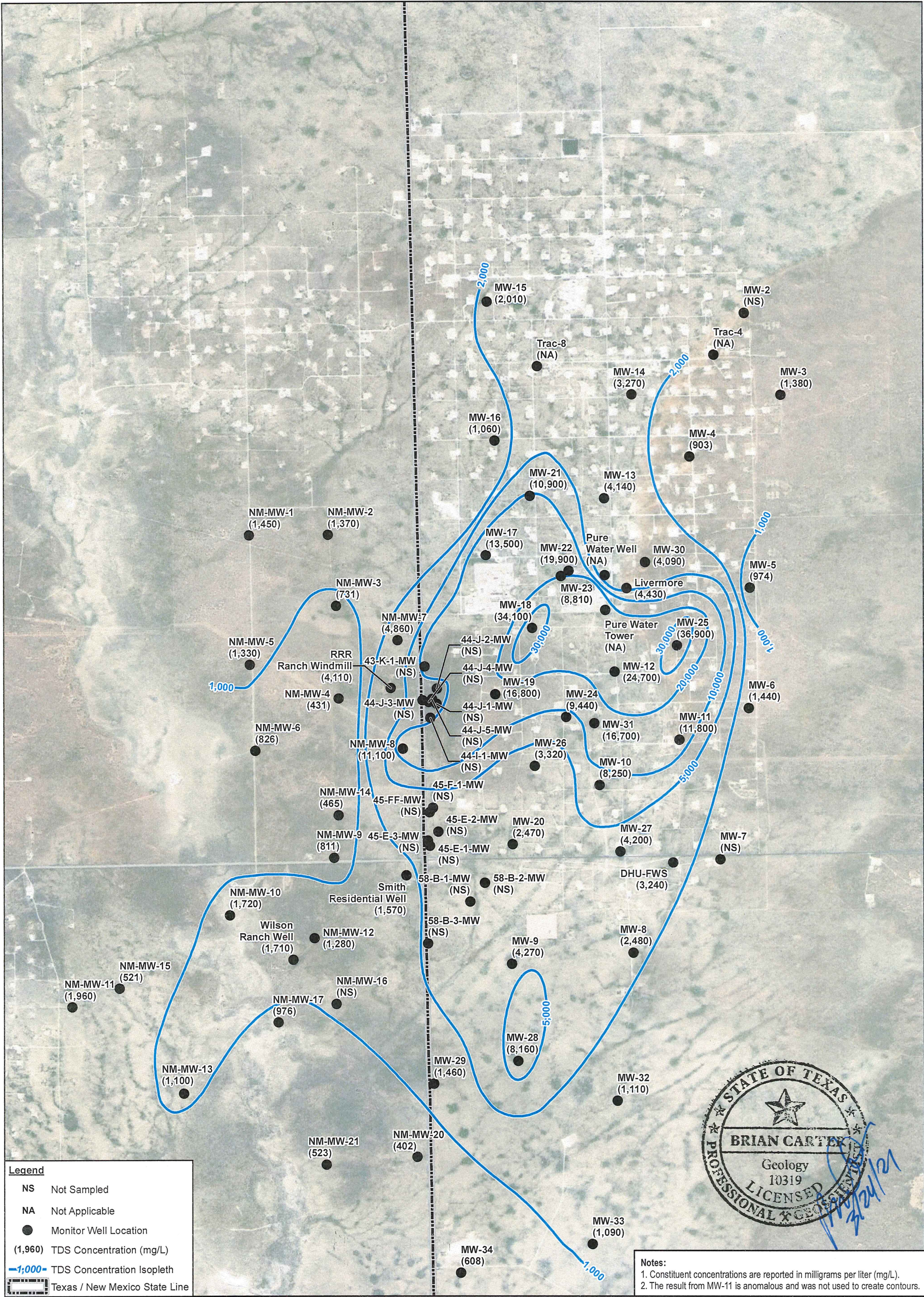
0 1,500 3,000
Feet
Coordinate System:
NAD 1983 UTM Zone 13N



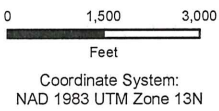
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
JULY 2020 GROUNDWATER TOTAL DISSOLVED
SOLIDS (TDS) CONCENTRATIONS & ISOPLETHS

055270
Mar 10, 2021

FIGURE 7



Source: ESRI World Imagery Basemap Service.



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
OCTOBER 2020 GROUNDWATER TOTAL DISSOLVED
SOLIDS (TDS) CONCENTRATIONS & ISOPLETHS

055270
Mar 10, 2021

FIGURE 8

Table 1
Groundwater Well Designations
Chevron Dollarhide Unit
Dollarhide, Texas

Well Group Designation	Well Identification
Recovery Wells	10-V-WW
	10-W-WW
	10-X-WW
	11-U-WW
	12-S-WW
	12-T-WW
	29-Q-WW
	29-R-WW
	30-O-WW
	31-N-WW
	43-K-WW
	43-L-WW
	43-M-WW
	44-H-WW
	44-I-WW
	44-II-WW
	44-J-WW
	45-EE-WW
	45-ER-WW
	45-F-WW
	45-G-WW
	58-A-WW
	58-B-WW
	58-BB-WW
	58-C-WW
	58-D-WW
Monitor Wells	43-K-1-MW
	44-I-1-MW
	44-J-1-MW
	44-J-2-MW
	44-J-3-MW
	44-J-4-MW
	44-J-5-MW
	45-E-1-MW
	45-E-2-MW
	45-E-3-MW
	45-F-1-MW
	45-FF-MW
	58-B-1-MW
	58-B-2-MW
	58-B-3-MW
	MW-2 ⁽¹⁾
	MW-3 ⁽¹⁾
	MW-4 ⁽¹⁾
	MW-5 ⁽¹⁾
	MW-6 ⁽¹⁾
	MW-7 ⁽¹⁾
	MW-8 ⁽¹⁾
	MW-9 ⁽¹⁾
	MW-10 ⁽¹⁾
	MW-11 ⁽¹⁾
	MW-12 ⁽¹⁾
	MW-13 ⁽¹⁾

Table 1
Groundwater Well Designations
Chevron Dollarhide Unit
Dollarhide, Texas

Well Group Designation	Well Identification
Monitor Wells	MW-14 ⁽¹⁾
	MW-15 ⁽¹⁾
	MW-16 ⁽¹⁾
	MW-17 ⁽¹⁾
	MW-18 ⁽¹⁾
	MW-19 ⁽¹⁾
	MW-20 ⁽¹⁾
	MW-21 ⁽¹⁾
	MW-22 ⁽¹⁾
	MW-23 ⁽¹⁾
	MW-24 ⁽¹⁾
	MW-25 ⁽¹⁾
	MW-26 ⁽¹⁾
	MW-27 ⁽¹⁾
	MW-28 ⁽¹⁾
	MW-29 ⁽¹⁾
	MW-30 ⁽¹⁾
	MW-31 ⁽¹⁾
	MW-32 ⁽¹⁾
	MW-33 ⁽¹⁾
	MW-34 ⁽¹⁾
	NM-MW-1 ⁽¹⁾
	NM-MW-2 ⁽¹⁾
	NM-MW-3 ⁽¹⁾
	NM-MW-4 ⁽¹⁾
	NM-MW-5 ⁽¹⁾
	NM-MW-6 ⁽¹⁾
	NM-MW-7 ⁽¹⁾
	NM-MW-8 ⁽¹⁾
	NM-MW-9 ⁽¹⁾
	NM-MW-10 ⁽¹⁾
	NM-MW-11 ⁽¹⁾
	NM-MW-12 ⁽¹⁾
	NM-MW-13 ⁽¹⁾
	NM-MW-14 ⁽¹⁾
	NM-MW-15 ⁽¹⁾
	NM-MW-16 ⁽¹⁾
	NM-MW-17 ⁽¹⁾
	NM-MW-20 ⁽¹⁾
	NM-MW-21 ⁽¹⁾
Non-Remedial Wells	Livermore
	Pure Water Tower
	Pure Water Well
	RRR Ranch Windmill
	TRAC-4
	TRAC-8
	Smith Residence
	Wilson Ranch Well

Note:

⁽¹⁾ Indicates monitor wells installed in 2015, 2016, 2017, 2019, and 2020 that are voluntarily sampled quarterly.

Table 2
July 2020 Groundwater Elevation Measurements
Chevron Dollarhide Unit
Andrews County, Texas

Well Identification	TOC Elevation (ft NAVD)	Depth to Water (ft below TOC)	Groundwater Elevation (ft NAVD)
Monitor Wells			
43-K-1-MW	NM	93.85	NA
44-I-1-MW	3,138.93	95.10	3,043.83
44-J-1-MW	3,134.50	94.87	3,039.63
44-J-2-MW	3,135.30	93.61	3,041.69
44-J-3-MW	3,140.19	95.15	3,045.04
44-J-4-MW	3,133.69	94.13	3,039.56
44-J-5-MW	3,134.75	95.24	3,039.51
45-E-1-MW	NM	87.16	NA
45-E-2-MW	NM	84.62	NA
45-E-3-MW	NM	87.66	NA
45-F-1-MW	NM	88.99	NA
45-FF-MW	3,122.70	89.43	3,033.27
58-B-1-MW	3,100.59	85.33	3,015.26
58-B-2-MW	3,111.91	84.36	3,027.55
58-B-3-MW	3,108.46	89.14	3,019.32
MW-2	3,204.56	DRY	NA
MW-3	3,199.51	113.28	3,086.23
MW-4	3,189.69	115.80	3,073.89
MW-5	3,174.43	103.05	3,071.38
MW-6	3,165.25	94.03	3,071.22
MW-7	3,132.14	DRY	NA
MW-8	3,107.34	84.23	3,023.11
MW-9	3,103.82	84.85	3,018.97
MW-10	3,139.71	97.14	3,042.57
MW-11	3,156.65	102.44	3,054.21
MW-12	3,151.33	94.85	3,056.48
MW-13	3,168.41	98.95	3,069.46
MW-14	3,182.69	107.02	3,075.67
MW-15	3,184.55	104.43	3,080.12
MW-16	3,167.93	99.72	3,068.21
MW-17	3,147.44	84.28	3,063.16
MW-18	3,155.01	95.81	3,059.20
MW-19	3,149.90	99.48	3,050.42
MW-20	3,120.09	88.07	3,032.02
MW-21	3,159.65	92.72	3,066.93
MW-22	3,152.50	87.99	3,064.51
MW-23	3,151.66	87.21	3,064.45
MW-24	3,144.88	95.10	3,049.78
MW-25	3,165.45	103.44	3,062.01
MW-26	3,136.99	93.66	3,043.33

Table 2
July 2020 Groundwater Elevation Measurements
Chevron Dollarhide Unit
Andrews County, Texas

Well Identification	TOC Elevation (ft NAVD)	Depth to Water (ft below TOC)	Groundwater Elevation (ft NAVD)
MW-27	3,126.99	91.35	3,035.64
MW-28	3,093.86	83.95	3,009.91
MW-29	3,098.60	100.29	2,998.31
MW-30	3,170.95	103.73	3,067.22
MW-31	3,145.41	94.48	3,050.93
MW-32	3,090.28	81.41	3,008.87
MW-33	3,080.02	76.99	3,003.03
MW-34	3,069.95	71.49	2,998.46
NM-MW-1	3,124.90	71.70	3,053.20
NM-MW-2	3,152.86	95.90	3,056.96
NM-MW-3	3,146.86	91.40	3,055.46
NM-MW-4	3,154.21	110.13	3,044.08
NM-MW-5	3,109.14	100.01	3,009.13
NM-MW-6	3,093.23	87.84	3,005.39
NM-MW-7	3,147.67	95.52	3,052.15
NM-MW-8	3,138.62	97.54	3,041.08
NM-MW-9	3,118.18	93.83	3,024.35
NM-MW-10	3,066.32	79.61	2,986.71
NM-MW-11	3,075.44	82.54	2,992.90
NM-MW-12	3,105.47	96.64	3,008.83
NM-MW-13	3,051.17	84.44	2,966.73
NM-MW-14	3,126.82	95.82	3,031.00
NM-MW-15	3,064.93	86.66	2,978.27
NM-MW-16	3,085.99	DRY	NA
NM-MW-17	3,035.70	58.43	2,977.27
NM-MW-20	3,091.29	93.37	2,997.92
NM-MW-21	3,047.98	76.53	2,971.45
Non-Remedial Wells			
RRR Ranch Windmill	NM	93.57	NA
Livermore	NM	95.48	NA
Pure Water Tower	3,154.43	NM	NA
TRAC-4	NM	NM	NA
TRAC-8	NM	NM	NA
Pure Water Well	3,151.80	NM	NA
Smith Residential Well	NM	NM	NA
Wilson Ranch	NM	NM	NA

Notes:

ft = feet

NM = Not Measured

NA = Not Applicable

TOC = top of casing

NAVD = North American Vertical Datum

Table 3

**October 2020 Groundwater Elevation Measurements
Chevron Dollarhide Unit
Andrews County, Texas**

Well Identification	TOC Elevation (ft NAVD)	Depth to Water (ft below TOC)	Groundwater Elevation (ft NAVD)
Monitor Wells			
MW-2	3,204.56	DRY	NA
MW-3	3,199.51	113.30	3,086.21
MW-4	3,189.69	115.85	3,073.84
MW-5	3,174.43	103.09	3,071.34
MW-6	3,165.25	94.17	3,071.08
MW-7	3,132.14	DRY	NA
MW-8	3,107.34	84.26	3,023.08
MW-9	3,103.82	84.82	3,019.00
MW-10	3,139.71	97.19	3,042.52
MW-11	3,156.65	102.54	3,054.11
MW-12	3,151.33	94.97	3,056.36
MW-13	3,168.41	99.01	3,069.40
MW-14	3,182.69	107.05	3,075.64
MW-15	3,184.55	104.44	3,080.11
MW-16	3,167.93	99.73	3,068.20
MW-17	3,147.44	84.36	3,063.08
MW-18	3,155.01	95.96	3,059.05
MW-19	3,149.90	99.58	3,050.32
MW-20	3,120.09	88.09	3,032.00
MW-21	3,159.65	92.78	3,066.87
MW-22	3,152.50	88.04	3,064.46
MW-23	3,151.66	87.26	3,064.40
MW-24	3,144.88	95.24	3,049.64
MW-25	3,165.45	103.49	3,061.96
MW-26	3,136.99	93.74	3,043.25
MW-27	3,126.99	91.39	3,035.60
MW-28	3,093.86	83.94	3,009.92
MW-29	3,098.60	100.26	2,998.34
MW-30	3,170.95	103.78	3,067.17
MW-31	3,145.41	94.63	3,050.78
MW-32	3,090.28	81.46	3,008.82
MW-33	3,080.02	77.07	3,002.95
MW-34	3,069.95	71.53	2,998.42

Table 3

**October 2020 Groundwater Elevation Measurements
Chevron Dollarhide Unit
Andrews County, Texas**

Well Identification	TOC Elevation (ft NAVD)	Depth to Water (ft below TOC)	Groundwater Elevation (ft NAVD)
NM-MW-1	3,124.90	71.84	3,053.06
NM-MW-2	3,152.86	95.94	3,056.92
NM-MW-3	3,146.86	91.43	3,055.43
NM-MW-4	3,154.21	110.09	3,044.12
NM-MW-5	3,109.14	100.10	3,009.04
NM-MW-6	3,093.23	87.92	3,005.31
NM-MW-7	3,147.67	95.53	3,052.14
NM-MW-8	3,138.62	97.49	3,041.13
NM-MW-9	3,118.18	93.80	3,024.38
NM-MW-10	3,066.32	79.61	2,986.71
NM-MW-11	3,075.44	82.85	2,992.59
NM-MW-12	3,105.47	96.61	3,008.86
NM-MW-13	3,051.17	84.49	2,966.68
NM-MW-14	3,126.82	95.85	3,030.97
NM-MW-15	3,064.93	87.71	2,977.22
NM-MW-16	3,085.99	93.06	2,992.93
NM-MW-17	3,035.70	58.52	2,977.18
NM-MW-20	3,091.29	93.39	2,997.90
NM-MW-21	3,047.98	76.57	2,971.41
Non-Remedial Wells			
RRR Ranch Windmill	NM	93.55	NA
Livermore	NM	95.52	NA
Pure Water Tower	3,154.43	NM	NA
TRAC-4	NM	NM	NA
TRAC-8	NM	NM	NA
Pure Water Well	3,151.80	NM	NA
Smith Residential Well	NM	NM	NA
Wilson Ranch	NM	NM	NA

Notes:

ft = feet

NM = Not Measured

NA = Not Applicable

TOC = top of casing

NAVD = North American Vertical Datum

Table 4

**Second Half 2020 Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Andrews County, Texas**

Sample ID	July		October	
	Chloride (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)	300	1,000	300	1,000
Monitor Wells				
43-K-1-MW	7,440	10,700	NS	NS
44-I-1-MW	3,660	5,840	NS	NS
44-J-1-MW	4,770	7,880	NS	NS
44-J-2-MW	5,120	8,210	NS	NS
44-J-3-MW	4,920	8,080	NS	NS
44-J-4-MW	4,450	8,020	NS	NS
44-J-5-MW	4,190	6,690	NS	NS
45-E-1-MW	3,100	5,540	NS	NS
45-E-2-MW	1,750	3,150	NS	NS
45-E-3-MW	5,690	8,480	NS	NS
45-F-1-MW	1,130	1,960	NS	NS
45-FF-MW	4,120	6,850	NS	NS
58-B-1-MW	7,160	11,400	NS	NS
58-B-2-MW	4,040	7,190	NS	NS
58-B-3-MW	1,640	3,160	NS	NS
MW-2	NS	NS	NS	NS
MW-3	648	1,550	671	1,380
MW-4	352	1,050	343	903
MW-5	267	1,090	267	974
MW-6	417	1,590	423	1,440
MW-7	NS	NS	NS	NS
MW-8	1,010	2,460	1,040	2,480
MW-9	2,700	5,070	2,710	4,270
MW-10	5,130	9,450	5,270	8,250
MW-11	6,240	12,000	68.2	11,800
MW-12	12,700	22,700	13,600	24,700
MW-13	1,750	4,350	1,820	4,140
MW-14	1,760	3,640	1,810	3,270
MW-15	1,110	2,330	1,110	2,010
MW-16	505	1,390	411	1,060
MW-17	7,450	15,000	8,280	13,500
MW-18	21,400	36,000	21,600	34,100
MW-19	7,880	13,700	7,990	16,800
MW-20	1,320	2,450	1,350	2,470
MW-21	5,850	10,700	6,840	10,900
MW-22	10,100	21,900	13,000	19,900
MW-23	6,060	12,600	5,450	8,810
MW-24	4,430	9,130	4,330	9,440
MW-25	26,100	37,300	24,100	36,900
MW-26	1,480	3,520	1,500	3,320

Table 4

**Second Half 2020 Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Andrews County, Texas**

Sample ID	July		October	
	Chloride (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)	300	1,000	300	1,000
MW-27	2,950	5,120	2,490	4,200
MW-28	3,370	6,510	3,780	8,160
MW-29	563	1,460	637	1,460
MW-30	2,290	4,530	2,240	4,090
MW-31	8,890	17,800	10,200	16,700
MW-32	321	1,140	349	1,110
MW-33	196	1,060	201	1,090
MW-34	71.3	613	73.3	608
NM-MW-1	293	1,450	288	1,450
NM-MW-2	696	1,530	706	1,370
NM-MW-3	261	811	253	731
NM-MW-4	46.9	419	47.7	431
NM-MW-5	162	1,250	155	1,330
NM-MW-6	152	828	147	826
NM-MW-7	2,360	5,250	2,270	4,860
NM-MW-8	6,540	12,400	6,370	11,100
NM-MW-9	271	852	256	811
NM-MW-10	366	1,650	366	1,720
NM-MW-11	178	2,120	181	1,960
NM-MW-12	589	1,270	580	1,280
NM-MW-13	212	1,130	211	1,100
NM-MW-14	25.0	488	26.4	465
NM-MW-15	57.3	509	59.9	521
NM-MW-16	NS	NS	NS	NS
NM-MW-17	211	978	216	976
NM-MW-20	22.2	377	23.0	402
NM-MW-21	28.8	524	29.8	523
Non-Remedial Wells				
Livermore	2,440	5,200	2,450	4,430
Pure Water Tower	NA	NA	NA	NA
Pure Water Well	NA	NA	NA	NA
RRR Ranch Windmill	1,930	4,490	1,960	4,110
Smith Residential Well	1,310	2,570	753	1,570
TRAC-4	NA	NA	NA	NA
TRAC-8	NA	NA	NA	NA
Wilson Ranch	1,030	1,990	784	1,710
DHU-FWS	628	3,120	650	3,240

Notes:

1. Constituent concentrations are reported in milligrams per liter (mg/L).
 2. Bold font indicates that a detected result was above the TCEQ Secondary Drinking Water
- NA = Not Applicable
NS = Not Sampled

Appendices

Appendix A

Historical Groundwater Elevations

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
Monitor Wells						
43-K-1-MW						
NM	02/28/07	NM	94.85	NA	NA	NA
	01/22/08	112.95	95.26	NA	NA	NA
	07/07/08	NM	95.33	NA	NA	NA
	08/26/09	114.28	95.69	NA	NA	NA
	01/28/09	112.95	95.32	NA	NA	NA
	08/16/10	NM	95.40	NA	NA	NA
	02/11/11	112.00	95.45	NA	NA	NA
	08/02/11	112.91	94.79	NA	NA	NA
	01/30/13	112.90	95.23	NA	NA	NA
	01/13/14	112.96	92.33	NA	NA	NA
	07/14/14	NM	95.29	NA	NA	NA
	01/12/15	NM	95.21	NA	NA	NA
	07/14/15	NM	95.00	NA	NA	NA
	01/25/16	116.47	94.90	NA	NA	NA
	07/20/16	NM	94.87	NA	NA	NA
	01/11/17	NM	94.82	NA	NA	NA
	07/13/17	NM	95.00	NA	NA	NA
	01/12/18	NM	94.61	NA	NA	NA
	07/02/18	NM	94.47	NA	NA	NA
	01/07/19	NM	94.20	NA	NA	NA
	07/11/19	112.89	94.16	NA	NA	NA
	01/15/20	NM	93.99	NA	NA	NA
	07/07/20	112.89	93.85	NA	NA	NA
44-I-1-MW						
3,133.50	06/13/06	108.25	93.55	NA	NA	3,039.95
	08/15/06	110.00	96.85	NA	NA	3,036.65
	09/13/06	106.38	96.91	NA	NA	3,036.59
	09/20/06	110.00	96.72	NA	NA	3,036.78
	10/04/06	110.00	96.94	NA	NA	3,036.56
	12/08/06	111.05	97.09	NA	NA	3,036.41
	02/13/07	108.25	96.85	NA	NA	3,036.65
	02/28/07	NM	96.85	NA	NA	3,036.65
	07/30/07	108.25	96.88	NA	NA	3,036.62
	01/22/08	108.25	97.05	NA	NA	3,036.45
	07/09/08	108.25	97.13	NA	NA	3,036.37
	01/28/09	108.25	97.46	NA	NA	3,036.04
	08/27/09	106.20	97.57	NA	NA	3,035.93
	02/19/10	NM	97.31	NA	NA	3,036.19
	08/16/10	NM	97.30	NA	NA	3,036.20
	02/11/11	NM	96.68	NA	NA	3,036.82
	08/02/11	106.70	96.17	NA	NA	3,037.33
	08/15/12	106.65	96.21	NA	NA	3,037.29
	01/30/13	106.26	95.97	NA	NA	3,037.53
	07/30/13	106.65	96.18	NA	NA	3,037.32
	01/13/14	106.65	96.21	NA	NA	3,037.29
	07/14/14	111.17	95.85	NA	NA	3,037.65
	01/12/15	NM	96.27	NA	NA	3,037.23
	07/14/15	NM	95.91	NA	NA	3,037.59
3,138.93	01/25/16	106.94	95.96	NA	NA	3,042.97
	07/20/16	NM	96.10	NA	NA	3,042.83
	01/12/17	NM	95.84	NA	NA	3,043.09
	07/13/17	NM	96.03	NA	NA	3,042.90
	01/12/18	NM	95.64	NA	NA	3,043.29
	07/02/18	NM	95.94	NA	NA	3,042.99
	01/09/19	NM	95.82	NA	NA	3,043.11
	07/11/19	106.21	95.53	NA	NA	3,043.40
	01/14/20	NM	95.39	NA	NA	3,043.54
	07/09/20	106.12	95.10	NA	NA	3,043.83

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
44-J-1-MW						
3,134.50	06/13/06	111.04	96.31	NA	NA	3,038.19
	07/13/06	111.04	96.38	NA	NA	3,038.12
	08/15/06	111.00	96.53	NA	NA	3,037.97
	09/13/06	110.00	96.54	NA	NA	3,037.96
	09/20/06	111.00	96.40	NA	NA	3,038.10
	10/04/06	111.00	96.64	NA	NA	3,037.86
	12/08/06	111.97	97.41	NA	NA	3,037.09
	02/13/07	111.04	96.39	NA	NA	3,038.11
	02/28/07	NM	96.39	NA	NA	3,038.11
	07/30/07	111.04	96.51	NA	NA	3,037.99
	01/22/08	111.04	96.86	NA	NA	3,037.64
	07/09/08	111.04	96.90	NA	NA	3,037.60
	01/28/09	111.04	97.21	NA	NA	3,037.29
	08/28/09	110.40	97.27	NA	NA	3,037.23
	08/16/10	NM	96.82	NA	NA	3,037.68
	02/11/11	NM	96.42	NA	NA	3,038.08
	08/02/11	110.72	95.90	NA	NA	3,038.60
	08/15/12	110.04	96.03	NA	NA	3,038.47
	01/30/13	110.69	95.79	NA	NA	3,038.71
	07/30/13	110.80	95.92	NA	NA	3,038.58
	01/13/14	110.81	95.96	NA	NA	3,038.54
	07/14/14	110.76	95.91	NA	NA	3,038.59
	01/12/15	NM	96.01	NA	NA	3,038.49
	01/25/16	NM	95.72	NA	NA	3,038.78
	07/20/16	NM	95.85	NA	NA	3,038.65
	01/12/17	NM	95.60	NA	NA	3,038.90
	07/13/17	NM	95.80	NA	NA	3,038.70
	01/12/18	NM	95.41	NA	NA	3,039.09
	07/02/18	NM	95.70	NA	NA	3,038.80
	01/09/19	NM	95.57	NA	NA	3,038.93
	07/11/19	110.59	95.29	NA	NA	3,039.21
	01/14/20	NM	95.15	NA	NA	3,039.35
	07/09/20	110.52	94.87	NA	NA	3,039.63
44-J-2-MW						
3,135.30	06/13/06	109.87	91.83	NA	NA	3,043.47
	07/13/06	109.87	94.82	NA	NA	3,040.48
	08/15/06	110.00	94.97	NA	NA	3,040.33
	09/13/06	110.00	95.01	NA	NA	3,040.29
	09/20/06	110.00	94.97	NA	NA	3,040.33
	10/04/06	110.00	96.56	NA	NA	3,038.74
	12/08/06	114.32	95.14	NA	NA	3,040.16
	02/13/07	109.87	94.68	NA	NA	3,040.62
	02/28/07	NM	94.68	NA	NA	3,040.62
	07/30/07	109.87	94.82	NA	NA	3,040.48
	01/22/08	109.87	95.04	NA	NA	3,040.26
	07/09/08	109.87	95.10	NA	NA	3,040.20
	01/28/09	109.87	95.29	NA	NA	3,040.01
	08/28/09	109.00	95.37	NA	NA	3,039.93
	02/19/10	NM	94.56	NA	NA	3,040.74
	08/16/10	NM	95.04	NA	NA	3,040.26
	02/11/11	NM	94.99	NA	NA	3,040.31
	08/02/11	108.75	94.48	NA	NA	3,040.82
	08/15/12	108.80	94.99	NA	NA	3,040.31
	01/30/13	108.90	94.57	NA	NA	3,040.73
	07/30/13	109.00	94.61	NA	NA	3,040.69
	01/13/14	109.03	94.56	NA	NA	3,040.74
	07/14/14	109.02	94.65	NA	NA	3,040.65
	01/12/15	NM	94.68	NA	NA	3,040.62
	07/14/15	NM	94.43	NA	NA	3,040.87
	01/25/16	109.01	94.39	NA	NA	3,040.91
	07/20/16	NM	94.45	NA	NA	3,040.85
	01/12/17	NM	94.30	NA	NA	3,041.00
	07/13/17	NM	94.48	NA	NA	3,040.82
	01/12/18	NM	94.15	NA	NA	3,041.15
	07/02/18	NM	94.31	NA	NA	3,040.99
	01/09/19	NM	94.14	NA	NA	3,041.16
	07/11/19	108.70	93.94	NA	NA	3,041.36
	01/14/20	NM	93.85	NA	NA	3,041.45
	07/09/20	108.67	93.61	NA	NA	3,041.69

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
44-J-3-MW						
3,135.25	07/13/06	113.00	96.77	NA	NA	3,038.48
	08/07/06	113.00	96.94	NA	NA	3,038.31
	08/15/06	113.00	96.98	NA	NA	3,038.27
	09/13/06	113.00	97.01	NA	NA	3,038.24
	09/20/06	113.00	95.96	NA	NA	3,039.29
	10/04/06	113.00	97.10	NA	NA	3,038.15
	12/08/06	120.40	97.04	NA	NA	3,038.21
	01/22/08	114.55	97.63	NA	NA	3,037.62
	08/28/09	114.60	97.97	NA	NA	3,037.28
	02/19/10	NM	97.21	NA	NA	3,038.04
	08/16/10	NM	97.20	NA	NA	3,038.05
	02/11/11	110.00	96.74	NA	NA	3,038.51
	08/02/11	114.71	96.27	NA	NA	3,038.98
	01/30/13	114.83	96.17	NA	NA	3,039.08
	07/30/13	114.55	96.22	NA	NA	3,039.03
	01/13/14	114.55	96.25	NA	NA	3,039.00
	07/14/14	114.51	96.23	NA	NA	3,039.02
	01/12/15	NM	96.30	NA	NA	3,038.95
	07/14/15	NM	96.01	NA	NA	3,039.24
3,140.19	01/25/16	114.59	96.02	NA	NA	3,044.17
	07/20/16	NM	96.03	NA	NA	3,044.16
	01/13/17	NM	95.94	NA	NA	3,044.25
	07/13/17	NM	96.05	NA	NA	3,044.14
	01/12/18	NM	95.72	NA	NA	3,044.47
	07/02/18	NM	95.87	NA	NA	3,044.32
	01/09/19	NM	95.66	NA	NA	3,044.53
	07/11/19	114.35	95.49	NA	NA	3,044.70
	01/14/20	NM	95.39	NA	NA	3,044.80
	07/09/20	114.42	95.15	NA	NA	3,045.04
44-J-4-MW						
3,133.69	07/13/06	111.00	95.79	NA	NA	3,037.90
	08/07/06	111.00	95.97	NA	NA	3,037.72
	08/15/06	111.00	96.02	NA	NA	3,037.67
	09/13/06	111.00	96.04	NA	NA	3,037.65
	09/20/06	111.00	96.00	NA	NA	3,037.69
	10/04/06	111.00	96.11	NA	NA	3,037.58
	12/08/06	115.05	96.09	NA	NA	3,037.60
	01/22/08	113.40	96.77	NA	NA	3,036.92
	08/27/09	113.20	97.09	NA	NA	3,036.60
	02/19/10	NM	96.26	NA	NA	3,037.43
	08/16/10	NM	96.23	NA	NA	3,037.46
	02/11/11	110.00	95.74	NA	NA	3,037.95
	08/02/11	113.43	95.22	NA	NA	3,038.47
	01/30/13	113.25	95.14	NA	NA	3,038.55
	07/30/13	112.95	95.19	NA	NA	3,038.50
	01/13/14	112.93	95.22	NA	NA	3,038.47
	07/14/14	112.94	95.21	NA	NA	3,038.48
	01/12/15	NM	95.25	NA	NA	3,038.44
	07/14/15	NM	94.98	NA	NA	3,038.71
	01/25/16	112.98	94.98	NA	NA	3,038.71
	07/20/16	NM	95.03	NA	NA	3,038.66
	01/12/17	NM	94.92	NA	NA	3,038.77
	07/13/17	NM	95.03	NA	NA	3,038.66
	01/12/18	NM	94.71	NA	NA	3,038.98
	07/02/18	NM	94.87	NA	NA	3,038.82
	01/09/19	NM	94.62	NA	NA	3,039.07
	07/11/19	113.25	94.48	NA	NA	3,039.21
	01/14/20	NM	94.37	NA	NA	3,039.32
	07/09/20	113.30	94.13	NA	NA	3,039.56

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
44-J-5-MW						
3,134.75	06/13/06	110.00	96.83	NA	NA	3,037.92
	07/13/06	110.00	96.83	NA	NA	3,037.92
	08/07/06	110.00	97.00	NA	NA	3,037.75
	08/15/06	110.00	97.01	NA	NA	3,037.74
	09/13/06	110.00	97.05	NA	NA	3,037.70
	09/20/06	110.00	97.02	NA	NA	3,037.73
	10/04/06	110.00	97.13	NA	NA	3,037.62
	12/08/06	117.61	97.13	NA	NA	3,037.62
	01/22/08	113.70	97.53	NA	NA	3,037.22
	08/27/09	113.60	97.88	NA	NA	3,036.87
	08/16/10	NM	97.23	NA	NA	3,037.52
	02/11/11	NM	96.84	NA	NA	3,037.91
	08/02/11	113.71	96.32	NA	NA	3,038.43
	01/30/13	113.70	96.23	NA	NA	3,038.52
	07/30/13	113.23	96.30	NA	NA	3,038.45
	01/13/14	113.25	96.33	NA	NA	3,038.42
	07/14/14	113.20	96.30	NA	NA	3,038.45
	01/12/15	NM	96.38	NA	NA	3,038.37
	07/14/15	NM	96.10	NA	NA	3,038.65
	01/25/16	113.26	96.10	NA	NA	3,038.65
	07/20/16	NM	96.14	NA	NA	3,038.61
	01/12/17	NM	96.02	NA	NA	3,038.73
	07/13/17	NM	96.16	NA	NA	3,038.59
	01/12/18	NM	95.80	NA	NA	3,038.95
	07/02/18	NM	95.98	NA	NA	3,038.77
	01/09/19	NM	95.81	NA	NA	3,038.94
	07/11/19	113.11	95.59	NA	NA	3,039.16
	01/14/20	NM	95.48	NA	NA	3,039.27
	07/09/20	113.67	95.24	NA	NA	3,039.51
45-E-1-MW						
NM	09/12/06	NM	88.92	NA	NA	NA
	12/08/06	105.50	89.15	NA	NA	NA
	02/13/07	107.06	88.51	NA	NA	NA
	02/28/07	NM	88.51	NA	NA	NA
	07/30/07	107.06	88.95	NA	NA	NA
	01/22/08	107.06	90.04	NA	NA	NA
	07/09/08	107.06	89.31	NA	NA	NA
	01/28/09	107.06	89.31	NA	NA	NA
	08/27/09	102.95	89.72	NA	NA	NA
	08/16/10	NM	90.37	NA	NA	NA
	02/11/11	NM	90.36	NA	NA	NA
	08/02/11	103.00	89.70	NA	NA	NA
	01/25/16	103.31	90.58	NA	NA	NA
	07/20/16	NM	90.65	NA	NA	NA
	01/12/17	NM	90.20	NA	NA	NA
	07/13/17	NM	89.96	NA	NA	NA
	01/12/18	NM	88.74	NA	NA	NA
	07/02/18	NM	88.37	NA	NA	NA
	01/09/19	NM	87.95	NA	NA	NA
	07/11/19	102.23	87.66	NA	NA	NA
	01/14/20	NM	87.44	NA	NA	NA
	07/09/20	102.90	87.16	NA	NA	NA

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
45-E-2-MW						
NM	09/12/06	NM	81.36	NA	NA	NA
	12/08/06	104.00	86.58	NA	NA	NA
	02/13/07	109.28	85.82	NA	NA	NA
	02/28/07	NM	85.82	NA	NA	NA
	07/30/07	109.28	86.49	NA	NA	NA
	01/22/08	109.28	86.58	NA	NA	NA
	07/09/08	109.28	86.86	NA	NA	NA
	01/28/09	109.28	86.79	NA	NA	NA
	08/26/09	104.20	87.28	NA	NA	NA
	08/16/10	NM	87.84	NA	NA	NA
	02/11/11	NM	88.03	NA	NA	NA
	08/02/11	104.25	87.21	NA	NA	NA
	08/15/12	104.23	87.82	NA	NA	NA
	01/25/16	104.48	88.34	NA	NA	NA
	07/20/16	NM	88.33	NA	NA	NA
	01/12/17	NM	87.93	NA	NA	NA
	07/13/17	NM	87.62	NA	NA	NA
	01/12/18	NM	86.23	NA	NA	NA
	07/02/18	NM	88.85	NA	NA	NA
	01/09/19	NM	85.41	NA	NA	NA
	07/11/19	104.10	85.11	NA	NA	NA
	01/14/20	NM	84.89	NA	NA	NA
	07/09/20	104.06	84.62	NA	NA	NA
45-E-3-MW						
NM	02/13/07	107.95	88.68	NA	NA	NA
	02/28/07	NM	88.68	NA	NA	NA
	07/26/07	107.95	89.30	NA	NA	NA
	01/22/08	107.95	89.54	NA	NA	NA
	07/08/08	107.95	89.70	NA	NA	NA
	01/28/06	107.95	89.70	NA	NA	NA
	08/26/09	110.00	90.06	NA	NA	NA
	08/16/10	NM	90.63	NA	NA	NA
	02/11/11	107.00	90.74	NA	NA	NA
	08/02/11	107.91	90.19	NA	NA	NA
	07/20/16	NM	91.05	NA	NA	NA
	01/11/17	NM	90.50	NA	NA	NA
	07/13/17	NM	90.37	NA	NA	NA
	01/12/18	NM	89.35	NA	NA	NA
	07/02/18	NM	88.75	NA	NA	NA
	01/09/19	NM	88.41	NA	NA	NA
	07/11/19	107.18	88.13	NA	NA	NA
	01/15/20	NM	87.87	NA	NA	NA
	07/07/20	107.91	87.66	NA	NA	NA

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
45-F-1-MW						
NM	06/13/06	108.19	90.99	NA	NA	NA
	09/12/06	NM	90.15	NA	NA	NA
	12/08/06	107.40	90.34	NA	NA	NA
	02/13/07	108.19	90.22	NA	NA	NA
	02/28/07	NM	90.02	NA	NA	NA
	07/30/07	108.19	90.22	NA	NA	NA
	01/22/08	108.19	90.52	NA	NA	NA
	07/09/08	108.19	90.63	NA	NA	NA
	01/28/09	108.19	90.81	NA	NA	NA
	08/27/09	106.80	90.93	NA	NA	NA
	08/16/10	NM	91.41	NA	NA	NA
	02/11/11	NM	91.52	NA	NA	NA
	08/02/11	107.03	91.15	NA	NA	NA
	08/15/12	108.02	91.40	NA	NA	NA
	01/30/13	106.82	91.29	NA	NA	NA
	07/30/13	107.90	91.70	NA	NA	NA
	01/14/13	107.94	91.71	NA	NA	NA
	07/14/14	107.87	91.53	NA	NA	NA
	01/12/15	NM	91.78	NA	NA	NA
	07/14/15	NM	91.62	NA	NA	NA
	01/25/16	107.90	91.72	NA	NA	NA
	07/20/16	NM	91.56	NA	NA	NA
	01/12/17	NM	91.40	NA	NA	NA
	07/13/17	NM	90.96	NA	NA	NA
	01/12/18	NM	90.44	NA	NA	NA
	07/02/18	NM	90.14	NA	NA	NA
	01/09/19	NM	89.78	NA	NA	NA
	07/11/19	106.79	89.49	NA	NA	NA
	01/14/20	NM	89.28	NA	NA	NA
	07/09/20	106.90	88.99	NA	NA	NA
45-FF-MW						
3,122.70	06/13/06	111.19	90.57	NA	NA	3,032.13
	09/12/06	NM	90.77	NA	NA	3,031.93
	12/08/06	114.00	90.94	NA	NA	3,031.76
	02/13/07	111.19	90.58	NA	NA	3,032.12
	02/28/07	NM	90.58	NA	NA	3,032.12
	07/30/07	111.19	90.81	NA	NA	3,031.89
	01/22/08	111.19	91.16	NA	NA	3,031.54
	07/09/08	111.19	91.22	NA	NA	3,031.48
	01/28/09	111.19	91.16	NA	NA	3,031.54
	08/27/09	107.50	91.54	NA	NA	3,031.16
	08/16/10	NM	92.01	NA	NA	3,030.69
	02/11/11	NM	92.19	NA	NA	3,030.51
	08/02/11	111.11	91.71	NA	NA	3,030.99
	01/30/13	110.91	91.92	NA	NA	3,030.78
	07/30/13	110.50	92.30	NA	NA	3,030.40
	01/13/14	110.51	92.33	NA	NA	3,030.37
	07/14/14	110.48	92.02	NA	NA	3,030.68
	01/12/15	NM	92.41	NA	NA	3,030.29
	07/14/15	NM	92.30	NA	NA	3,030.40
	01/25/16	110.94	92.36	NA	NA	3,030.34
	07/20/16	NM	92.16	NA	NA	3,030.54
	01/12/17	NM	91.96	NA	NA	3,030.74
	07/13/17	NM	91.55	NA	NA	3,031.15
	01/12/18	NM	90.90	NA	NA	3,031.80
	07/02/18	NM	90.54	NA	NA	3,032.16
	01/09/19	NM	90.31	NA	NA	3,032.39
	07/11/19	110.16	89.90	NA	NA	3,032.80
	01/14/20	NM	89.70	NA	NA	3,033.00
	07/09/20	110.80	89.43	NA	NA	3,033.27

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
58-B-1-MW						
3,100.59	06/14/06	NM	NM	NA	NA	NA
	09/12/06	NM	87.12	NA	NA	3,013.47
	12/08/06	106.20	87.06	NA	NA	3,013.53
	02/13/07	105.50	87.02	NA	NA	3,013.57
	02/28/07	NM	87.02	NA	NA	3,013.57
	07/26/07	105.50	87.37	NA	NA	3,013.22
	01/22/08	105.50	87.79	NA	NA	3,012.80
	07/08/08	105.50	87.67	NA	NA	3,012.92
	01/28/09	104.79	87.67	NA	NA	3,012.92
	08/26/09	104.80	87.77	NA	NA	3,012.82
	08/16/10	NM	87.88	NA	NA	3,012.71
	02/11/11	NM	87.43	NA	NA	3,013.16
	08/05/11	104.55	87.00	NA	NA	3,013.59
	08/15/12	104.59	88.12	NA	NA	3,012.47
	01/30/13	107.53	87.76	NA	NA	3,012.83
	07/30/13	104.50	88.56	NA	NA	3,012.03
	01/13/14	104.56	88.60	NA	NA	3,011.99
	07/14/14	104.47	87.92	NA	NA	3,012.67
	01/12/15	NM	88.38	NA	NA	3,012.21
	07/22/16	NM	87.70	NA	NA	3,012.89
	01/13/17	NM	87.20	NA	NA	3,013.39
	07/13/17	NM	86.71	NA	NA	3,013.88
	01/12/18	NM	85.34	NA	NA	3,015.25
	07/02/18	NM	86.12	NA	NA	3,014.47
	01/07/19	NM	85.76	NA	NA	3,014.83
	07/09/19	104.40	85.69	NA	NA	3,014.90
	01/14/20	NM	85.52	NA	NA	3,015.07
	07/08/20	104.43	85.33	NA	NA	3,015.26
58-B-2-MW						
3,111.91	06/14/06	NM	NM	NA	NA	NA
	09/12/06	NM	85.80	NA	NA	3,026.11
	12/08/06	NM	85.60	NA	NA	3,026.31
	02/13/07	105.45	85.61	NA	NA	3,026.30
	02/28/07	NM	85.61	NA	NA	3,026.30
	07/26/07	105.45	85.88	NA	NA	3,026.03
	01/22/08	105.45	86.28	NA	NA	3,025.63
	07/08/08	105.45	86.16	NA	NA	3,025.75
	01/28/09	105.45	86.23	NA	NA	3,025.68
	08/26/09	104.50	86.33	NA	NA	3,025.58
	08/16/10	NM	86.42	NA	NA	3,025.49
	02/11/11	NM	86.11	NA	NA	3,025.80
	08/02/11	105.12	85.75	NA	NA	3,026.16
	08/15/12	105.43	86.70	NA	NA	3,025.21
	07/14/15	NM	88.61	NA	NA	3,023.30
	01/25/16	105.08	85.92	NA	NA	3,025.99
	07/22/16	NM	86.40	NA	NA	3,025.51
	01/13/17	NM	85.92	NA	NA	3,025.99
	07/13/17	NM	85.55	NA	NA	3,026.36
	01/12/18	NM	86.47	NA	NA	3,025.44
	07/02/18	NM	85.10	NA	NA	3,026.81
	01/07/19	NM	84.75	NA	NA	3,027.16
	07/09/19	104.47	84.67	NA	NA	3,027.24
	01/14/20	NM	84.52	NA	NA	3,027.39
	07/09/20	104.61	84.36	NA	NA	3,027.55

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
58-B-3-MW						
3,108.46	02/13/07	100.75	89.48	NA	NA	3,018.98
	02/28/07	NM	89.48	NA	NA	3,018.98
	07/26/07	100.75	89.39	NA	NA	3,019.07
	01/22/08	100.75	89.71	NA	NA	3,018.75
	07/08/08	100.75	89.75	NA	NA	3,018.71
	01/28/09	100.75	89.81	NA	NA	3,018.65
	08/26/09	104.00	89.88	NA	NA	3,018.58
	08/16/10	NM	90.05	NA	NA	3,018.41
	02/11/11	102.00	90.02	NA	NA	3,018.44
	08/02/11	100.68	89.97	NA	NA	3,018.49
	08/15/12	100.73	90.11	NA	NA	3,018.35
	01/30/13	100.89	90.16	NA	NA	3,018.30
	07/30/13	100.80	90.24	NA	NA	3,018.22
	01/13/14	100.80	90.33	NA	NA	3,018.13
	07/14/14	100.79	90.39	NA	NA	3,018.07
	01/12/15	NM	89.80	NA	NA	3,018.66
	07/14/15	NM	90.06	NA	NA	3,018.40
	01/25/16	100.78	90.08	NA	NA	3,018.38
	07/22/16	NM	90.14	NA	NA	3,018.32
	01/10/17	NM	90.02	NA	NA	3,018.44
	07/13/17	NM	89.88	NA	NA	3,018.58
	01/12/18	NM	89.78	NA	NA	3,018.68
	07/02/18	NM	89.62	NA	NA	3,018.84
	01/07/19	NM	89.36	NA	NA	3,019.10
	07/09/19	100.68	89.37	NA	NA	3,019.09
	01/13/20	NM	89.23	NA	NA	3,019.23
	07/07/20	100.71	89.14	NA	NA	3,019.32
MW-2						
3,204.56	8/7/2015	NM	104.07	NA	NA	3,100.49
	1/25/2016	109.14	109.05	NA	NA	3,095.51
	7/21/2016	NM	109.10	NA	NA	3,095.46
	1/12/2017	NM	109.20	NA	NA	3,095.36
	4/10/2017	109.71	DRY	NA	NA	DRY
	7/13/2017	NM	109.14	NA	NA	3,095.42
	10/3/2017	109.33	DRY	NA	NA	DRY
	1/12/2018	109.15	DRY	NA	NA	DRY
	4/2/2018	109.15	DRY	NA	NA	DRY
	07/02/18	109.15	DRY	NA	NA	DRY
	10/1/2018	109.58	DRY	NA	NA	DRY
	1/8/2019	109.70	DRY	NA	NA	DRY
	4/9/2019	109.45	DRY	NA	NA	DRY
	7/9/2019	109.14	DRY	NA	NA	DRY
	10/9/2019	NM	DRY	NA	NA	DRY
	1/16/2020	NM	DRY	NA	NA	DRY
	4/7/2020	109.11	DRY	NA	NA	DRY
	7/6/2020	109.09	DRY	NA	NA	DRY
	10/12/20	109.13	DRY	NA	NA	DRY

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**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-3						
3,199.51	8/7/2015	NM	112.88	NA	NA	3,086.63
	1/25/2016	119.30	112.95	NA	NA	3,086.56
	7/21/2016	NM	113.02	NA	NA	3,086.49
	1/11/2017	NM	112.95	NA	NA	3,086.56
	4/10/2017	NM	113.17	NA	NA	3,086.34
	7/13/2017	NM	113.04	NA	NA	3,086.47
	10/3/2017	NM	113.11	NA	NA	3,086.40
	1/12/2018	NM	113.04	NA	NA	3,086.47
	4/2/2018	NM	113.20	NA	NA	3,086.31
	07/02/18	NM	113.09	NA	NA	3,086.42
	10/1/2018	NM	113.14	NA	NA	3,086.37
	1/8/2019	NM	113.10	NA	NA	3,086.41
	4/9/2019	NM	113.13	NA	NA	3,086.38
	7/10/2019	119.39	113.19	NA	NA	3,086.32
	10/9/2019	NM	113.78	NA	NA	3,085.73
	1/16/2020	NM	113.29	NA	NA	3,086.22
	4/7/2020	119.44	113.24	NA	NA	3,086.27
	7/6/2020	119.38	113.28	NA	NA	3,086.23
	10/12/2020	119.39	113.30	NA	NA	3,086.21
MW-4						
3,189.69	8/7/2015	NM	115.53	NA	NA	3,074.16
	1/25/2016	116.91	115.60	NA	NA	3,074.09
	7/21/2016	NM	115.65	NA	NA	3,074.04
	1/11/2017	NM	115.55	NA	NA	3,074.14
	4/10/2017	117.74	115.67	NA	NA	3,074.02
	7/13/2017	NM	115.64	NA	NA	3,074.05
	10/3/2017	118.13	115.65	NA	NA	3,074.04
	1/12/2018	NM	115.60	NA	NA	3,074.09
	4/2/2018	NM	115.70	NA	NA	3,073.99
	07/02/18	NM	115.61	NA	NA	3,074.08
	10/1/2018	NM	115.72	NA	NA	3,073.97
	1/8/2019	NM	115.65	NA	NA	3,074.04
	4/9/2019	NM	115.70	NA	NA	3,073.99
	7/10/2019	116.93	115.74	NA	NA	3,073.95
	10/9/2019	NM	115.93	NA	NA	3,073.76
	1/16/2020	NM	115.86	NA	NA	3,073.83
	4/7/2020	117.55	115.76	NA	NA	3,073.93
	7/6/2020	117.04	115.80	NA	NA	3,073.89
	10/12/2020	117.06	115.85	NA	NA	3,073.84
MW-5						
3,174.43	8/7/2015	NM	102.74	NA	NA	3,071.69
	1/25/2016	116.91	102.78	NA	NA	3,071.65
	7/21/2016	NM	102.84	NA	NA	3,071.59
	1/11/2017	NM	102.80	NA	NA	3,071.63
	4/10/2017	116.95	102.85	NA	NA	3,071.58
	7/13/2017	NM	102.88	NA	NA	3,071.55
	10/3/2017	NM	102.91	NA	NA	3,071.52
	1/12/2018	NM	102.95	NA	NA	3,071.48
	4/2/2018	NM	102.94	NA	NA	3,071.49
	07/02/18	NM	102.93	NA	NA	3,071.50
	10/1/2018	NM	103.00	NA	NA	3,071.43
	1/8/2019	NM	102.90	NA	NA	3,071.53
	4/9/2019	NM	102.99	NA	NA	3,071.44
	7/10/2019	116.96	103.00	NA	NA	3,071.43
	10/9/2019	NM	103.02	NA	NA	3,071.41
	1/16/2020	NM	103.07	NA	NA	3,071.36
	4/7/2020	116.97	103.03	NA	NA	3,071.40
	7/6/2020	116.94	103.05	NA	NA	3,071.38
	10/12/2020	116.96	103.09	NA	NA	3,071.34

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**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-6						
3,165.25	8/7/2015	NM	93.97	NA	NA	3,071.28
	1/25/2016	130.94	94.21	NA	NA	3,071.04
	7/21/2016	NM	94.28	NA	NA	3,070.97
	1/11/2017	NM	94.01	NA	NA	3,071.24
	4/10/2017	130.83	94.21	NA	NA	3,071.04
	7/13/2017	NM	94.11	NA	NA	3,071.14
	10/3/2017	NM	94.14	NA	NA	3,071.11
	1/12/2018	NM	93.80	NA	NA	3,071.45
	4/2/2018	NM	94.18	NA	NA	3,071.07
	07/02/18	NM	93.89	NA	NA	3,071.36
	10/1/2018	NM	93.90	NA	NA	3,071.35
	1/8/2019	NM	93.94	NA	NA	3,071.31
	4/9/2019	NM	93.74	NA	NA	3,071.51
	7/10/2019	128.94	93.92	NA	NA	3,071.33
	10/9/2019	NM	93.80	NA	NA	3,071.45
	1/15/2020	NM	94.01	NA	NA	3,071.24
	4/7/2020	130.92	93.99	NA	NA	3,071.26
	7/8/2020	130.89	94.03	NA	NA	3,071.22
	10/12/220	130.92	94.17	NA	NA	3,071.08
MW-7						
3,132.14	8/7/2015	NM	112.10	NA	NA	3,020.04
	1/25/2016	117.20	112.77	NA	NA	3,019.37
	7/21/2016	NM	114.50	NA	NA	3,017.64
	1/11/2017	NM	115.92	NA	NA	3,016.22
	4/10/2017	116.73	DRY	NA	NA	DRY
	7/13/2017	116.55	DRY	NA	NA	DRY
	10/3/2017	116.46	DRY	NA	NA	DRY
	1/12/2018	NM	DRY	NA	NA	DRY
	4/2/2018	116.66	DRY	NA	NA	DRY
	07/02/18	116.70	DRY	NA	NA	DRY
	10/1/2018	116.61	DRY	NA	NA	DRY
	1/8/2019	116.61	DRY	NA	NA	DRY
	4/5/2019	117.09	DRY	NA	NA	DRY
	7/10/2019	116.59	DRY	NA	NA	DRY
	10/8/2019	NM	DRY	NA	NA	DRY
	1/14/2020	NM	DRY	NA	NA	DRY
	4/7/2020	116.60	DRY	NA	NA	DRY
	7/8/2020	116.59	DRY	NA	NA	DRY
	10/12/2020	116.61	DRY	NA	NA	DRY
MW-8						
3,107.34	8/7/2015	NM	85.03	NA	NA	3,022.31
	1/25/2016	110.98	85.46	NA	NA	3,021.88
	7/21/2016	NM	85.10	NA	NA	3,022.24
	1/13/2017	NM	84.95	NA	NA	3,022.39
	4/7/2017	110.98	85.00	NA	NA	3,022.34
	7/13/2017	NM	84.68	NA	NA	3,022.66
	10/3/2017	NM	84.86	NA	NA	3,022.48
	1/12/2018	NM	84.75	NA	NA	3,022.59
	4/2/2018	NM	85.20	NA	NA	3,022.14
	07/02/18	NM	85.09	NA	NA	3,022.25
	10/1/2018	NM	84.83	NA	NA	3,022.51
	1/8/2019	NM	84.81	NA	NA	3,022.53
	4/5/2019	NM	84.52	NA	NA	3,022.82
	7/9/2019	110.97	84.45	NA	NA	3,022.89
	10/8/2019	NM	84.33	NA	NA	3,023.01
	1/14/2020	NM	84.42	NA	NA	3,022.92
	4/7/2020	111.00	84.35	NA	NA	3,022.99
	7/8/2020	110.97	84.23	NA	NA	3,023.11
	10/12/2020	110.97	84.26	NA	NA	3,023.08

Appendix A
Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-9						
3,103.82	8/7/2015	NM	85.68	NA	NA	3,018.14
	1/25/2016	105.30	85.87	NA	NA	3,017.95
	7/21/2016	NM	85.80	NA	NA	3,018.02
	1/13/2017	NM	85.76	NA	NA	3,018.06
	4/7/2017	105.28	85.65	NA	NA	3,018.17
	7/13/2017	NM	85.50	NA	NA	3,018.32
	10/3/2017	NM	85.53	NA	NA	3,018.29
	1/12/2018	NM	85.38	NA	NA	3,018.44
	4/2/2018	NM	85.73	NA	NA	3,018.09
	07/02/18	NM	85.24	NA	NA	3,018.58
	10/1/2018	NM	85.24	NA	NA	3,018.58
	1/7/2019	NM	85.05	NA	NA	3,018.77
	4/5/2019	NM	85.09	NA	NA	3,018.73
	7/9/2019	102.06	85.02	NA	NA	3,018.80
	10/8/2019	NM	84.93	NA	NA	3,018.89
	1/15/2020	NM	85.02	NA	NA	3,018.80
	4/7/2020	101.63	84.91	NA	NA	3,018.91
	7/8/2020	101.65	84.85	NA	NA	3,018.97
	10/12/2020	101.66	84.82	NA	NA	3,019.00
MW-10						
3,139.71	8/7/2015	NM	97.21	NA	NA	3,042.50
	1/25/2016	116.50	97.33	NA	NA	3,042.38
	7/20/2016	NM	97.18	NA	NA	3,042.53
	1/12/2017	NM	97.21	NA	NA	3,042.50
	4/7/2017	116.36	97.22	NA	NA	3,042.49
	7/13/2017	NM	97.12	NA	NA	3,042.59
	10/3/2017	NM	97.35	NA	NA	3,042.36
	1/12/2018	NM	97.30	NA	NA	3,042.41
	4/2/2018	NM	97.41	NA	NA	3,042.30
	07/02/18	NM	97.24	NA	NA	3,042.47
	10/1/2018	NM	97.35	NA	NA	3,042.36
	1/8/2019	NM	97.35	NA	NA	3,042.36
	4/5/2019	NM	97.22	NA	NA	3,042.49
	7/9/2019	116.65	97.22	NA	NA	3,042.49
	10/8/2019	NM	97.12	NA	NA	3,042.59
	1/15/2020	NM	97.32	NA	NA	3,042.39
	4/7/2020	116.38	97.17	NA	NA	3,042.54
	7/8/2020	116.36	97.14	NA	NA	3,042.57
	10/12/2020	116.36	97.19	NA	NA	3,042.52
MW-11						
3,156.65	8/7/2015	NM	102.00	NA	NA	3,054.65
	1/25/2016	110.23	102.08	NA	NA	3,054.57
	7/21/2016	NM	102.16	NA	NA	3,054.49
	1/11/2017	NM	102.10	NA	NA	3,054.55
	4/10/2017	110.02	102.22	NA	NA	3,054.43
	7/13/2017	NM	102.22	NA	NA	3,054.43
	10/3/2017	NM	102.28	NA	NA	3,054.37
	1/12/2018	NM	102.18	NA	NA	3,054.47
	4/2/2018	NM	102.39	NA	NA	3,054.26
	07/02/18	NM	102.28	NA	NA	3,054.37
	10/1/2018	NM	102.35	NA	NA	3,054.30
	1/8/2019	NM	102.35	NA	NA	3,054.30
	4/9/2019	NM	102.45	NA	NA	3,054.20
	7/10/2019	110.03	102.41	NA	NA	3,054.24
	10/9/2019	NM	102.36	NA	NA	3,054.29
	1/15/2020	NM	102.47	NA	NA	3,054.18
	4/7/2020	110.09	102.45	NA	NA	3,054.20
	7/8/2020	110.03	102.44	NA	NA	3,054.21
	10/12/2020	110.02	102.54	NA	NA	3,054.11

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-12						
3,151.33	8/7/2015	NM	94.70	NA	NA	3,056.63
	1/25/2016	114.18	94.68	NA	NA	3,056.65
	7/20/2016	NM	94.69	NA	NA	3,056.64
	1/11/2017	NM	94.70	NA	NA	3,056.63
	4/7/2017	114.15	94.66	NA	NA	3,056.67
	7/13/2017	NM	94.60	NA	NA	3,056.73
	10/3/2017	NM	94.87	NA	NA	3,056.46
	1/12/2018	NM	94.66	NA	NA	3,056.67
	4/2/2018	NM	94.74	NA	NA	3,056.59
	07/02/18	NM	94.71	NA	NA	3,056.62
	10/1/2018	NM	94.87	NA	NA	3,056.46
	1/8/2019	NM	94.92	NA	NA	3,056.41
	4/10/2019	NM	94.75	NA	NA	3,056.58
	7/9/2019	114.14	94.85	NA	NA	3,056.48
	10/8/2019	NM	94.71	NA	NA	3,056.62
	1/15/2020	NM	94.97	NA	NA	3,056.36
	4/7/2020	114.16	94.85	NA	NA	3,056.48
	7/8/2020	114.14	94.85	NA	NA	3,056.48
	10/12/2020	114.14	94.97	NA	NA	3,056.36
MW-13						
3,168.41	8/7/2015	NM	98.61	NA	NA	3,069.80
	1/25/2016	127.85	98.88	NA	NA	3,069.53
	7/21/2016	NM	98.78	NA	NA	3,069.63
	1/11/2017	NM	98.49	NA	NA	3,069.92
	4/10/2017	127.90	98.70	NA	NA	3,069.71
	7/13/2017	NM	98.60	NA	NA	3,069.81
	10/3/2017	NM	98.70	NA	NA	3,069.71
	1/12/2018	NM	98.61	NA	NA	3,069.80
	4/2/2018	NM	98.80	NA	NA	3,069.61
	07/02/18	NM	98.74	NA	NA	3,069.67
	10/1/2018	NM	98.88	NA	NA	3,069.53
	1/8/2019	NM	98.90	NA	NA	3,069.51
	4/10/2019	NM	98.83	NA	NA	3,069.58
	7/10/2019	127.89	98.88	NA	NA	3,069.53
	10/9/2019	NM	98.94	NA	NA	3,069.47
	1/16/2020	NM	98.99	NA	NA	3,069.42
	4/8/2020	127.95	98.89	NA	NA	3,069.52
	7/6/2020	127.86	98.95	NA	NA	3,069.46
	10/12/2020	127.89	99.01	NA	NA	3,069.40
MW-14						
3,182.69	8/7/2015	NM	106.69	NA	NA	3,076.00
	1/25/2016	124.62	106.78	NA	NA	3,075.91
	7/21/2016	NM	106.90	NA	NA	3,075.79
	1/11/2017	NM	106.78	NA	NA	3,075.91
	4/10/2017	124.48	107.01	NA	NA	3,075.68
	7/13/2017	NM	106.88	NA	NA	3,075.81
	10/3/2017	NM	106.95	NA	NA	3,075.74
	1/12/2018	NM	106.85	NA	NA	3,075.84
	4/2/2018	NM	107.00	NA	NA	3,075.69
	07/02/18	NM	106.91	NA	NA	3,075.78
	10/1/2018	NM	106.98	NA	NA	3,075.71
	1/8/2019	NM	106.97	NA	NA	3,075.72
	4/9/2019	NM	106.96	NA	NA	3,075.73
	7/10/2019	124.43	107.00	NA	NA	3,075.69
	10/9/2019	NM	106.96	NA	NA	3,075.73
	1/16/2020	NM	107.06	NA	NA	3,075.63
	4/8/2020	124.43	106.99	NA	NA	3,075.70
	7/6/2020	124.47	107.02	NA	NA	3,075.67
	10/12/2020	124.48	107.05	NA	NA	3,075.64

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-15						
3,184.55	8/7/2015	NM	104.29	NA	NA	3,080.26
	1/25/2016	126.36	104.56	NA	NA	3,079.99
	7/21/2016	NM	104.60	NA	NA	3,079.95
	1/11/2017	NM	104.45	NA	NA	3,080.10
	4/10/2017	NM	104.76	NA	NA	3,079.79
	7/13/2017	NM	104.52	NA	NA	3,080.03
	10/3/2017	NM	104.66	NA	NA	3,079.89
	1/12/2018	NM	104.45	NA	NA	3,080.10
	4/2/2018	NM	104.63	NA	NA	3,079.92
	07/02/18	NM	104.56	NA	NA	3,079.99
	10/1/2018	NM	104.57	NA	NA	3,079.98
	1/8/2019	NM	104.54	NA	NA	3,080.01
	4/10/2019	NM	104.50	NA	NA	3,080.05
	7/10/2019	126.59	104.49	NA	NA	3,080.06
	10/9/2019	NM	104.35	NA	NA	3,080.20
	1/16/2020	NM	104.51	NA	NA	3,080.04
	4/8/2020	126.64	104.42	NA	NA	3,080.13
	7/6/2020	126.61	104.43	NA	NA	3,080.12
	10/12/2020	126.61	104.44	NA	NA	3,080.11
MW-16						
3,167.93	8/7/2015	NM	99.76	NA	NA	3,068.17
	1/25/2016	119.30	99.86	NA	NA	3,068.07
	7/21/2016	NM	100.02	NA	NA	3,067.91
	1/11/2017	NM	99.88	NA	NA	3,068.05
	4/10/2017	119.07	100.03	NA	NA	3,067.90
	7/13/2017	NM	99.94	NA	NA	3,067.99
	10/3/2017	NM	100.01	NA	NA	3,067.92
	1/12/2018	NM	99.83	NA	NA	3,068.10
	4/2/2018	NM	99.97	NA	NA	3,067.96
	07/02/18	NM	99.92	NA	NA	3,068.01
	10/1/2018	NM	99.93	NA	NA	3,068.00
	1/8/2019	NM	99.86	NA	NA	3,068.07
	4/10/2019	NM	99.86	NA	NA	3,068.07
	7/10/2019	119.06	99.83	NA	NA	3,068.10
	10/9/2019	NM	99.72	NA	NA	3,068.21
	1/16/2020	NM	99.80	NA	NA	3,068.13
	4/8/2020	119.10	99.70	NA	NA	3,068.23
	7/6/2020	119.05	99.72	NA	NA	3,068.21
	10/12/2020	119.06	99.73	NA	NA	3,068.20
MW-17						
3,147.44	8/7/2015	NM	83.74	NA	NA	3,063.70
	1/25/2016	118.27	84.18	NA	NA	3,063.26
	7/20/2016	NM	82.79	NA	NA	3,064.65
	1/11/2017	NM	83.75	NA	NA	3,063.69
	4/10/2017	118.26	84.27	NA	NA	3,063.17
	7/13/2017	NM	84.06	NA	NA	3,063.38
	10/3/2017	NM	84.08	NA	NA	3,063.36
	1/12/2018	NM	83.79	NA	NA	3,063.65
	4/2/2018	NM	84.26	NA	NA	3,063.18
	07/02/18	NM	84.32	NA	NA	3,063.12
	10/1/2018	NM	84.41	NA	NA	3,063.03
	1/8/2019	NM	84.25	NA	NA	3,063.19
	4/10/2019	NM	84.02	NA	NA	3,063.42
	7/10/2019	118.20	84.15	NA	NA	3,063.29
	10/9/2019	NM	84.09	NA	NA	3,063.35
	1/16/2020	NM	84.24	NA	NA	3,063.20
	4/8/2020	118.34	84.15	NA	NA	3,063.29
	7/6/2020	118.31	84.28	NA	NA	3,063.16
	10/12/2020	118.32	84.36	NA	NA	3,063.08

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Chevron Dollarhide Unit
Dollarhide, Texas

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-18						
3,155.01	8/7/2015	NM	95.94	NA	NA	3,059.07
	1/25/2016	122.40	95.81	NA	NA	3,059.20
	7/20/2016	NM	95.91	NA	NA	3,059.10
	1/12/2017	NM	95.82	NA	NA	3,059.19
	4/7/2017	122.37	95.76	NA	NA	3,059.25
	7/13/2017	NM	95.67	NA	NA	3,059.34
	10/3/2017	NM	95.87	NA	NA	3,059.14
	1/12/2018	NM	95.72	NA	NA	3,059.29
	4/2/2018	NM	95.80	NA	NA	3,059.21
	07/02/18	NM	95.74	NA	NA	3,059.27
	10/1/2018	NM	95.90	NA	NA	3,059.11
	1/8/2019	NM	95.88	NA	NA	3,059.13
	4/9/2019	NM	95.76	NA	NA	3,059.25
	7/10/2019	122.35	95.89	NA	NA	3,059.12
	10/9/2019	NM	95.84	NA	NA	3,059.17
	1/15/2020	NM	95.92	NA	NA	3,059.09
	4/7/2020	122.47	95.83	NA	NA	3,059.18
	7/8/2020	122.33	95.81	NA	NA	3,059.20
	10/12/2020	122.35	95.96	NA	NA	3,059.05
MW-19						
3,149.90	8/7/2015	NM	99.58	NA	NA	3,050.32
	1/25/2016	115.04	99.68	NA	NA	3,050.22
	7/20/2016	NM	99.78	NA	NA	3,050.12
	1/12/2017	NM	99.68	NA	NA	3,050.22
	4/7/2017	115.03	99.78	NA	NA	3,050.12
	7/13/2017	NM	99.61	NA	NA	3,050.29
	10/3/2017	NM	99.83	NA	NA	3,050.07
	1/12/2018	NM	99.63	NA	NA	3,050.27
	4/2/2018	NM	99.69	NA	NA	3,050.21
	07/02/18	NM	99.85	NA	NA	3,050.05
	10/1/2018	NM	99.75	NA	NA	3,050.15
	1/8/2019	NM	99.78	NA	NA	3,050.12
	4/9/2019	NM	99.56	NA	NA	3,050.34
	7/10/2019	114.99	99.69	NA	NA	3,050.21
	10/9/2019	NM	99.54	NA	NA	3,050.36
	1/15/2020	NM	99.67	NA	NA	3,050.23
	4/7/2020	115.01	99.56	NA	NA	3,050.34
	7/8/2020	115.00	99.48	NA	NA	3,050.42
	10/12/2020	115.01	99.58	NA	NA	3,050.32
MW-20						
3,120.09	8/7/2015	NM	88.96	NA	NA	3,031.13
	1/25/2016	112.91	88.96	NA	NA	3,031.13
	7/20/2016	NM	89.07	NA	NA	3,031.02
	1/12/2017	NM	89.00	NA	NA	3,031.09
	4/7/2017	112.65	88.97	NA	NA	3,031.12
	7/13/2017	NM	88.76	NA	NA	3,031.33
	10/3/2017	NM	88.88	NA	NA	3,031.21
	1/12/2018	NM	88.75	NA	NA	3,031.34
	4/2/2018	NM	88.67	NA	NA	3,031.42
	07/02/18	NM	88.69	NA	NA	3,031.40
	10/1/2018	NM	88.59	NA	NA	3,031.50
	1/8/2019	NM	88.57	NA	NA	3,031.52
	4/5/2019	NM	88.37	NA	NA	3,031.72
	7/9/2019	112.53	88.31	NA	NA	3,031.78
	10/8/2019	NM	88.19	NA	NA	3,031.90
	1/14/2020	NM	88.27	NA	NA	3,031.82
	4/7/2020	112.51	88.15	NA	NA	3,031.94
	7/9/2020	112.53	88.07	NA	NA	3,032.02
	10/12/2020	112.55	88.09	NA	NA	3,032.00

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Chevron Dollarhide Unit
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TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-21						
3,159.65	7/21/2016	NM	92.31	NA	NA	3,067.34
	1/12/2017	NM	92.41	NA	NA	3,067.24
	4/10/2017	123.74	92.65	NA	NA	3,067.00
	7/13/2017	NM	92.55	NA	NA	3,067.10
	10/3/2017	NM	92.65	NA	NA	3,067.00
	1/12/2018	NM	92.47	NA	NA	3,067.18
	4/2/2018	NM	92.64	NA	NA	3,067.01
	07/02/18	NM	92.65	NA	NA	3,067.00
	10/1/2018	NM	92.74	NA	NA	3,066.91
	1/8/2019	NM	92.73	NA	NA	3,066.92
	4/10/2019	NM	92.64	NA	NA	3,067.01
	7/10/2019	123.75	92.70	NA	NA	3,066.95
	10/9/2019	NM	92.61	NA	NA	3,067.04
	1/16/2020	NM	92.80	NA	NA	3,066.85
	4/8/2020	123.76	92.65	NA	NA	3,067.00
	7/6/2020	123.75	92.72	NA	NA	3,066.93
	10/12/2020	123.75	92.78	NA	NA	3,066.87
MW-22						
3,152.50	4/10/2017	117.94	87.78	NA	NA	3,064.72
	7/13/2017	NM	87.64	NA	NA	3,064.86
	10/3/2017	NM	87.71	NA	NA	3,064.79
	1/12/2018	NM	87.50	NA	NA	3,065.00
	4/2/2018	NM	87.75	NA	NA	3,064.75
	07/02/18	NM	87.75	NA	NA	3,064.75
	10/1/2018	NM	87.85	NA	NA	3,064.65
	1/8/2019	NM	87.90	NA	NA	3,064.60
	4/10/2019	NM	87.79	NA	NA	3,064.71
	7/10/2019	114.81	87.93	NA	NA	3,064.57
	10/9/2019	NM	87.80	NA	NA	3,064.70
	1/16/2020	NM	88.03	NA	NA	3,064.47
	4/8/2020	117.15	87.91	NA	NA	3,064.59
	7/6/2020	117.24	87.99	NA	NA	3,064.51
	10/12/2020	117.23	88.04	NA	NA	3,064.46
MW-23						
3,151.66	7/21/2016	NM	87.03	NA	NA	3,064.63
	1/11/2017	NM	86.74	NA	NA	3,064.92
	4/10/2017	124.94	87.02	NA	NA	3,064.64
	7/13/2017	NM	86.86	NA	NA	3,064.80
	10/3/2017	NM	86.95	NA	NA	3,064.71
	1/12/2018	NM	86.75	NA	NA	3,064.91
	4/2/2018	NM	86.98	NA	NA	3,064.68
	07/02/18	NM	86.98	NA	NA	3,064.68
	10/1/2018	NM	87.08	NA	NA	3,064.58
	1/8/2019	NM	87.17	NA	NA	3,064.49
	4/10/2019	NM	87.02	NA	NA	3,064.64
	7/10/2019	104.97	87.12	NA	NA	3,064.54
	10/9/2019	NM	87.06	NA	NA	3,064.60
	1/16/2020	NM	87.26	NA	NA	3,064.40
	4/8/2020	124.89	87.12	NA	NA	3,064.54
	7/6/1930	124.88	87.21	NA	NA	3,064.45
	10/12/2020	124.91	87.26	NA	NA	3,064.40

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-24						
3,144.88	7/20/2016	NM	95.02	NA	NA	3,049.86
	1/12/2017	NM	95.11	NA	NA	3,049.77
	4/7/2017	115.39	95.15	NA	NA	3,049.73
	7/13/2017	NM	95.11	NA	NA	3,049.77
	10/3/2017	NM	95.33	NA	NA	3,049.55
	1/12/2018	NM	95.18	NA	NA	3,049.70
	4/2/2018	NM	95.23	NA	NA	3,049.65
	07/02/18	NM	95.12	NA	NA	3,049.76
	10/1/2018	NM	95.25	NA	NA	3,049.63
	1/8/2019	NM	95.22	NA	NA	3,049.66
	4/9/2019	NM	95.05	NA	NA	3,049.83
	7/9/2019	115.43	95.08	NA	NA	3,049.80
	10/8/2019	NM	95.03	NA	NA	3,049.85
	1/15/2020	NM	95.19	NA	NA	3,049.69
	4/7/2020	115.46	95.06	NA	NA	3,049.82
	7/8/2020	115.42	95.10	NA	NA	3,049.78
	10/12/2020	115.43	95.24	NA	NA	3,049.64
MW-25						
3,165.45	7/21/2016	NM	103.05	NA	NA	3,062.40
	1/11/2017	NM	103.00	NA	NA	3,062.45
	4/10/2017	116.81	103.26	NA	NA	3,062.19
	7/13/2017	NM	103.17	NA	NA	3,062.28
	10/3/2017	NM	103.20	NA	NA	3,062.25
	1/12/2018	NM	103.04	NA	NA	3,062.41
	4/2/2018	NM	103.50	NA	NA	3,061.95
	07/02/18	NM	103.29	NA	NA	3,062.16
	10/1/2018	NM	103.34	NA	NA	3,062.11
	1/8/2019	NM	103.39	NA	NA	3,062.06
	4/9/2019	NM	103.28	NA	NA	3,062.17
	7/10/2019	116.79	103.38	NA	NA	3,062.07
	10/9/2019	NM	103.31	NA	NA	3,062.14
	1/15/2020	NM	103.45	NA	NA	3,062.00
	4/7/2020	116.81	103.41	NA	NA	3,062.04
	7/8/2020	116.82	103.44	NA	NA	3,062.01
	10/12/2020	116.83	103.49	NA	NA	3,061.96
MW-26						
3,136.99	1/12/2017	NM	93.78	NA	NA	3,043.21
	4/7/2017	108.41	93.83	NA	NA	3,043.16
	7/13/2017	NM	93.75	NA	NA	3,043.24
	10/3/2017	NM	94.00	NA	NA	3,042.99
	1/12/2018	NM	93.76	NA	NA	3,043.23
	4/2/2018	NM	93.89	NA	NA	3,043.10
	07/02/18	NM	94.00	NA	NA	3,042.99
	10/1/2018	NM	93.91	NA	NA	3,043.08
	1/6/2019	NM	93.88	NA	NA	3,043.11
	4/9/2019	NM	93.74	NA	NA	3,043.25
	7/9/2019	108.37	93.76	NA	NA	3,043.23
	10/8/2019	NM	93.61	NA	NA	3,043.38
	1/15/2020	NM	93.84	NA	NA	3,043.15
	4/7/2020	108.41	93.71	NA	NA	3,043.28
	7/8/2020	108.40	93.66	NA	NA	3,043.33
	10/12/2020	108.29	93.74	NA	NA	3,043.25

Appendix A
Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-27						
3,126.99	7/20/2016	NM	91.61	NA	NA	3,035.38
	1/11/2017	NM	91.40	NA	NA	3,035.59
	4/7/2017	108.40	91.65	NA	NA	3,035.34
	7/13/2017	NM	91.60	NA	NA	3,035.39
	10/3/2017	NM	91.80	NA	NA	3,035.19
	1/12/2018	NM	91.78	NA	NA	3,035.21
	4/2/2018	NM	92.08	NA	NA	3,034.91
	07/02/18	NM	91.98	NA	NA	3,035.01
	10/1/2018	NM	92.07	NA	NA	3,034.92
	1/8/2019	NM	91.86	NA	NA	3,035.13
	4/5/2019	NM	91.70	NA	NA	3,035.29
	7/9/2019	108.04	91.66	NA	NA	3,035.33
	10/8/2019	NM	91.50	NA	NA	3,035.49
	1/14/2020	NM	91.50	NA	NA	3,035.49
	4/7/2020	108.48	91.42	NA	NA	3,035.57
	7/8/2020	108.39	91.35	NA	NA	3,035.64
	10/12/2020	108.40	91.39	NA	NA	3,035.60
MW-28						
3,093.86	1/10/2017	NM	83.60	NA	NA	3,010.26
	4/7/2017	104.02	83.74	NA	NA	3,010.12
	7/13/2017	NM	83.78	NA	NA	3,010.08
	10/3/2017	NM	83.79	NA	NA	3,010.07
	1/12/2018	NM	83.84	NA	NA	3,010.02
	4/2/2018	NM	83.84	NA	NA	3,010.02
	07/02/18	NM	83.89	NA	NA	3,009.97
	10/1/2018	NM	83.62	NA	NA	3,010.24
	1/9/2019	NM	83.79	NA	NA	3,010.07
	4/9/2019	NM	83.89	NA	NA	3,009.97
	7/9/2019	103.95	83.93	NA	NA	3,009.93
	10/8/2019	NM	83.93	NA	NA	3,009.93
	1/15/2020	NM	83.94	NA	NA	3,009.92
	4/7/2020	104.04	83.89	NA	NA	3,009.97
	7/8/2020	104.04	83.95	NA	NA	3,009.91
	10/8/2020	104.02	83.94	NA	NA	3,009.92
MW-29						
3,098.60	1/10/2017	NM	99.85	NA	NA	2,998.75
	4/7/2017	113.55	99.97	NA	NA	2,998.63
	7/13/2017	NM	100.00	NA	NA	2,998.60
	10/3/2017	NM	99.95	NA	NA	2,998.65
	1/12/2018	NM	100.08	NA	NA	2,998.52
	4/2/2018	NM	100.17	NA	NA	2,998.43
	07/02/18	NM	100.16	NA	NA	2,998.44
	10/1/2018	NM	100.11	NA	NA	2,998.49
	1/7/2019	NM	100.04	NA	NA	2,998.56
	4/5/2019	NM	100.21	NA	NA	2,998.39
	7/9/2019	113.41	100.25	NA	NA	2,998.35
	10/8/2019	NM	100.22	NA	NA	2,998.38
	1/15/2020	NM	100.30	NA	NA	2,998.30
	4/7/2020	113.50	100.31	NA	NA	2,998.29
	7/8/2020	113.42	100.29	NA	NA	2,998.31
	10/8/2020	113.42	100.26	NA	NA	2,998.34

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**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
MW-30						
3,170.95	7/13/2017	NM	103.41	NA	NA	3,067.54
	10/3/2017	NM	103.57	NA	NA	3,067.38
	1/12/2018	NM	103.19	NA	NA	3,067.76
	4/2/2018	NM	103.71	NA	NA	3,067.24
	07/02/18	NM	103.46	NA	NA	3,067.49
	10/1/2018	NM	103.58	NA	NA	3,067.37
	1/8/2019	NM	103.67	NA	NA	3,067.28
	4/10/2019	NM	103.52	NA	NA	3,067.43
	7/10/2019	123.89	103.66	NA	NA	3,067.29
	10/9/2019	NM	103.48	NA	NA	3,067.47
	1/16/2020	NM	103.92	NA	NA	3,067.03
	4/8/2020	123.89	103.67	NA	NA	3,067.28
	7/6/2020	123.89	103.73	NA	NA	3,067.22
	10/12/2020	123.91	103.78	NA	NA	3,067.17
MW-31						
3,145.41	7/13/2017	NM	94.50	NA	NA	3,050.91
	10/3/2017	NM	94.74	NA	NA	3,050.67
	1/12/2018	NM	94.60	NA	NA	3,050.81
	4/2/2018	NM	94.60	NA	NA	3,050.81
	07/02/18	NM	94.50	NA	NA	3,050.91
	10/1/2018	NM	94.62	NA	NA	3,050.79
	1/8/2019	NM	94.59	NA	NA	3,050.82
	4/5/2019	NM	94.42	NA	NA	3,050.99
	7/9/2019	102.57	94.46	NA	NA	3,050.95
	10/8/2019	NM	94.40	NA	NA	3,051.01
	1/16/2020	NM	94.60	NA	NA	3,050.81
	4/7/2020	102.77	94.44	NA	NA	3,050.97
	7/8/2020	102.74	94.48	NA	NA	3,050.93
	10/12/2020	102.79	94.63	NA	NA	3,050.78
MW-32						
3,090.28	4/10/2019	94.04	81.18	NA	NA	3,009.10
	7/9/2019	93.44	81.39	NA	NA	3,008.89
	10/8/2019	NM	81.42	NA	NA	3,008.86
	1/15/2020	NM	81.45	NA	NA	3,008.83
	4/8/2020	93.40	81.35	NA	NA	3,008.93
	7/8/2020	93.47	81.41	NA	NA	3,008.87
	10/8/2020	93.41	81.46	NA	NA	3,008.82
MW-33						
3,080.02	4/10/2019	92.98	76.84	NA	NA	3,003.18
	7/9/2019	92.97	77.00	NA	NA	3,003.02
	10/8/2019	NM	77.09	NA	NA	3,002.93
	1/15/2020	NM	77.09	NA	NA	3,002.93
	4/8/2020	92.58	76.98	NA	NA	3,003.04
	7/8/2020	92.72	76.99	NA	NA	3,003.03
	10/8/2020	92.81	77.07	NA	NA	3,002.95
MW-34						
3,069.95	4/10/2019	78.04	71.21	NA	NA	2,998.74
	7/9/2019	78.03	71.42	NA	NA	2,998.53
	10/8/2019	NM	71.45	NA	NA	2,998.50
	1/15/2020	NM	71.41	NA	NA	2,998.54
	4/8/2020	78.02	71.45	NA	NA	2,998.50
	7/8/2020	78.07	71.49	NA	NA	2,998.46
	10/8/2020	78.05	71.53	NA	NA	2,998.42

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**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
NM-MW-1						
3,124.90	12/2/2015	NM	72.01	NA	NA	3,052.89
	1/25/2016	106.86	72.01	NA	NA	3,052.89
	7/22/2016	NM	71.90	NA	NA	3,053.00
	1/12/2017	NM	71.73	NA	NA	3,053.17
	4/7/2017	106.36	71.78	NA	NA	3,053.12
	7/13/2017	NM	71.67	NA	NA	3,053.23
	10/3/2017	NM	71.65	NA	NA	3,053.25
	1/12/2018	NM	71.63	NA	NA	3,053.27
	4/2/2018	NM	71.66	NA	NA	3,053.24
	07/02/18	NM	70.65	NA	NA	3,054.25
	10/1/2018	NM	71.71	NA	NA	3,053.19
	1/7/2019	NM	71.63	NA	NA	3,053.27
	4/4/2019	NM	71.61	NA	NA	3,053.29
	7/8/2019	105.91	71.58	NA	NA	3,053.32
	10/7/2019	NM	71.76	NA	NA	3,053.14
	1/13/2020	NM	71.66	NA	NA	3,053.24
	4/6/2020	105.95	71.67	NA	NA	3,053.23
	7/9/2020	105.84	71.70	NA	NA	3,053.20
	10/7/2020	105.94	71.84	NA	NA	3,053.06
NM-MW-2						
3,152.86	12/2/2015	NM	96.14	NA	NA	3,056.72
	1/25/2016	120.55	96.38	NA	NA	3,056.48
	7/22/2016	NM	96.28	NA	NA	3,056.58
	1/12/2017	NM	96.20	NA	NA	3,056.66
	4/7/2017	120.60	96.49	NA	NA	3,056.37
	7/13/2017	NM	96.25	NA	NA	3,056.61
	10/3/2017	NM	96.17	NA	NA	3,056.69
	1/12/2018	NM	96.29	NA	NA	3,056.57
	4/2/2018	NM	96.18	NA	NA	3,056.68
	07/02/18	NM	96.42	NA	NA	3,056.44
	10/1/2018	NM	96.28	NA	NA	3,056.58
	1/7/2019	NM	96.14	NA	NA	3,056.72
	4/4/2019	NM	96.20	NA	NA	3,056.66
	7/8/2019	120.53	96.02	NA	NA	3,056.84
	10/7/2019	NM	96.30	NA	NA	3,056.56
	1/13/2020	NM	96.00	NA	NA	3,056.86
	4/6/2020	120.68	95.98	NA	NA	3,056.88
	7/9/2020	120.54	95.90	NA	NA	3,056.96
	10/7/2020	120.60	95.94	NA	NA	3,056.92
NM-MW-3						
3,146.86	12/2/2015	NM	91.70	NA	NA	3,055.16
	1/25/2016	105.01	91.80	NA	NA	3,055.06
	7/22/2016	NM	91.81	NA	NA	3,055.05
	1/12/2017	NM	91.75	NA	NA	3,055.11
	4/7/2017	105.28	91.99	NA	NA	3,054.87
	7/13/2017	NM	91.92	NA	NA	3,054.94
	10/3/2017	NM	91.90	NA	NA	3,054.96
	1/12/2018	NM	91.93	NA	NA	3,054.93
	4/2/2018	NM	91.82	NA	NA	3,055.04
	07/02/18	NM	91.88	NA	NA	3,054.98
	10/1/2018	NM	91.78	NA	NA	3,055.08
	1/7/2019	NM	81.68	NA	NA	3,065.18
	4/4/2019	NM	91.70	NA	NA	3,055.16
	7/8/2019	105.31	91.55	NA	NA	3,055.31
	10/7/2019	NM	91.72	NA	NA	3,055.14
	1/13/2020	NM	91.50	NA	NA	3,055.36
	4/6/2020	105.28	91.47	NA	NA	3,055.39
	7/9/2020	105.27	91.40	NA	NA	3,055.46
	10/7/2020	105.40	91.43	NA	NA	3,055.43

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**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
NM-MW-4						
3,154.21	12/2/2015	NM	110.59	NA	NA	3,043.62
	1/25/2016	116.91	110.46	NA	NA	3,043.75
	7/22/2016	NM	110.57	NA	NA	3,043.64
	1/12/2017	NM	110.40	NA	NA	3,043.81
	4/7/2017	117.19	110.52	NA	NA	3,043.69
	7/13/2017	NM	110.50	NA	NA	3,043.71
	10/3/2017	NM	110.52	NA	NA	3,043.69
	1/12/2018	NM	110.48	NA	NA	3,043.73
	4/2/2018	NM	110.55	NA	NA	3,043.66
	07/02/18	NM	110.38	NA	NA	3,043.83
	10/1/2018	NM	110.44	NA	NA	3,043.77
	1/7/2019	NM	110.34	NA	NA	3,043.87
	4/4/2019	NM	110.36	NA	NA	3,043.85
	7/8/2019	117.12	110.27	NA	NA	3,043.94
	10/7/2019	NM	110.35	NA	NA	3,043.86
	1/13/2020	NM	110.23	NA	NA	3,043.98
	4/6/2020	117.11	110.24	NA	NA	3,043.97
	7/9/2020	117.16	110.13	NA	NA	3,044.08
	10/7/2020	117.16	110.09	NA	NA	3,044.12
NM-MW-5						
3,109.14	12/2/2015	NM	DRY	NA	NA	DRY
	1/25/2016	115.00	99.95	NA	NA	3,009.19
	7/22/2016	NM	99.78	NA	NA	3,009.36
	1/12/2017	NM	99.70	NA	NA	3,009.44
	4/7/2017	114.92	99.66	NA	NA	3,009.48
	7/13/2017	NM	99.80	NA	NA	3,009.34
	10/3/2017	NM	99.69	NA	NA	3,009.45
	1/12/2018	NM	99.80	NA	NA	3,009.34
	4/2/2018	NM	99.76	NA	NA	3,009.38
	07/02/18	NM	99.82	NA	NA	3,009.32
	10/1/2018	NM	99.89	NA	NA	3,009.25
	1/7/2019	NM	99.61	NA	NA	3,009.53
	4/4/2019	NM	99.74	NA	NA	3,009.40
	7/8/2019	114.43	99.94	NA	NA	3,009.20
	10/7/2019	NM	99.78	NA	NA	3,009.36
	1/13/2020	NM	99.88	NA	NA	3,009.26
	4/6/2020	114.41	99.79	NA	NA	3,009.35
	7/9/2020	114.37	100.01	NA	NA	3,009.13
	10/7/2020	114.59	100.10	NA	NA	3,009.04
NM-MW-6						
3,093.23	12/2/2015	NM	86.98	NA	NA	3,006.25
	1/25/2016	123.21	86.93	NA	NA	3,006.30
	7/22/2016	NM	87.10	NA	NA	3,006.13
	1/12/2017	NM	87.35	NA	NA	3,005.88
	4/7/2017	123.16	87.42	NA	NA	3,005.81
	7/13/2017	NM	87.47	NA	NA	3,005.76
	10/3/2017	NM	87.47	NA	NA	3,005.76
	1/12/2018	NM	87.57	NA	NA	3,005.66
	4/2/2018	NM	87.53	NA	NA	3,005.70
	07/02/18	NM	87.66	NA	NA	3,005.57
	10/1/2018	NM	87.70	NA	NA	3,005.53
	1/7/2019	NM	87.64	NA	NA	3,005.59
	4/4/2019	NM	87.81	NA	NA	3,005.42
	7/8/2019	121.02	87.77	NA	NA	3,005.46
	10/7/2019	NM	87.89	NA	NA	3,005.34
	1/13/2020	NM	87.83	NA	NA	3,005.40
	4/6/2020	121.07	87.82	NA	NA	3,005.41
	7/9/2020	121.09	87.84	NA	NA	3,005.39
	10/7/2020	121.80	87.92	NA	NA	3,005.31

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**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
NM-MW-7						
3,147.67	12/2/2015	NM	96.71	NA	NA	3,050.96
	1/25/2016	105.52	96.79	NA	NA	3,050.88
	7/22/2016	NM	96.91	NA	NA	3,050.76
	1/12/2017	NM	96.80	NA	NA	3,050.87
	4/7/2017	105.89	97.20	NA	NA	3,050.47
	7/13/2017	NM	97.12	NA	NA	3,050.55
	10/3/2017	NM	96.73	NA	NA	3,050.94
	1/12/2018	NM	96.40	NA	NA	3,051.27
	4/2/2018	NM	96.26	NA	NA	3,051.41
	07/02/18	NM	96.13	NA	NA	3,051.54
	10/1/2018	NM	96.07	NA	NA	3,051.60
	1/7/2019	NM	95.88	NA	NA	3,051.79
	4/4/2019	NM	95.91	NA	NA	3,051.76
	7/8/2019	105.92	95.75	NA	NA	3,051.92
	10/7/2019	NM	95.88	NA	NA	3,051.79
	1/13/2020	NM	95.65	NA	NA	3,052.02
	4/6/2020	106.47	95.63	NA	NA	3,052.04
	7/9/2020	105.56	95.52	NA	NA	3,052.15
	10/7/2020	105.84	95.53	NA	NA	3,052.14
NM-MW-8						
3,138.62	4/7/2017	108.33	98.63	NA	NA	3,039.99
	7/13/2017	NM	98.49	NA	NA	3,040.13
	10/3/2017	NM	98.42	NA	NA	3,040.20
	1/12/2018	NM	98.34	NA	NA	3,040.28
	4/2/2018	NM	98.35	NA	NA	3,040.27
	07/02/18	NM	98.22	NA	NA	3,040.40
	10/1/2018	NM	98.16	NA	NA	3,040.46
	1/7/2019	NM	98.03	NA	NA	3,040.59
	4/4/2019	NM	98.01	NA	NA	3,040.61
	7/8/2019	108.33	97.83	NA	NA	3,040.79
	10/7/2019	NM	97.89	NA	NA	3,040.73
	1/13/2020	NM	97.74	NA	NA	3,040.88
	4/6/2020	108.39	97.72	NA	NA	3,040.90
	7/9/2020	108.36	97.54	NA	NA	3,041.08
	10/7/2020	108.28	97.49	NA	NA	3,041.13
NM-MW-9						
3,118.18	4/7/2017	96.79	96.73	NA	NA	3,021.45
	7/13/2017	NM	95.58	NA	NA	3,022.60
	10/3/2017	NM	95.37	NA	NA	3,022.81
	1/12/2018	NM	94.94	NA	NA	3,023.24
	4/2/2018	NM	94.71	NA	NA	3,023.47
	07/02/18	NM	94.60	NA	NA	3,023.58
	10/1/2018	NM	94.60	NA	NA	3,023.58
	1/7/2019	NM	94.39	NA	NA	3,023.79
	4/5/2019	NM	97.37	NA	NA	3,020.81
	7/8/2019	96.77	94.21	NA	NA	3,023.97
	10/7/2019	NM	94.17	NA	NA	3,024.01
	1/13/2020	96.79	94.08	NA	NA	3,024.10
	4/6/2020	96.78	93.92	NA	NA	3,024.26
	7/7/2020	56.77	93.83	NA	NA	3,024.35
	10/8/2020	96.78	93.80	NA	NA	3,024.38

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
NM-MW-10						
3,066.32	1/10/2017	NM	78.94	NA	NA	2,987.38
	4/7/2017	108.10	79.02	NA	NA	2,987.30
	7/13/2017	NM	79.09	NA	NA	2,987.23
	10/3/2017	NM	79.12	NA	NA	2,987.20
	1/12/2018	NM	79.15	NA	NA	2,987.17
	4/2/2018	NM	79.23	NA	NA	2,987.09
	07/02/18	NM	79.24	NA	NA	2,987.08
	10/1/2018	NM	79.32	NA	NA	2,987.00
	1/7/2019	NM	79.27	NA	NA	2,987.05
	4/4/2019	NM	79.37	NA	NA	2,986.95
	7/8/2019	108.43	79.42	NA	NA	2,986.90
	10/7/2019	NM	79.48	NA	NA	2,986.84
	1/13/2020	NM	79.53	NA	NA	2,986.79
	4/6/2020	108.41	79.55	NA	NA	2,986.77
	7/7/2020	108.40	79.61	NA	NA	2,986.71
	10/8/2020	108.41	79.61	NA	NA	2,986.71
NM-MW-11						
3,075.44	1/10/2017	NM	150.11	NA	NA	2,925.33
	4/7/2017	163.56	127.16	NA	NA	2,948.28
	7/13/2017	NM	107.66	NA	NA	2,967.78
	10/3/2017	NM	97.78	NA	NA	2,977.66
	1/12/2018	NM	90.89	NA	NA	2,984.55
	4/2/2018	NM	87.75	NA	NA	2,987.69
	07/02/18	NM	86.07	NA	NA	2,989.37
	10/1/2018	NM	84.80	NA	NA	2,990.64
	1/7/2019	NM	83.28	NA	NA	2,992.16
	4/4/2019	NM	82.82	NA	NA	2,992.62
	7/8/2019	163.02	82.94	NA	NA	2,992.50
	10/8/2019	NM	82.97	NA	NA	2,992.47
	1/13/2020	NM	82.58	NA	NA	2,992.86
	4/6/2020	166.05	82.29	NA	NA	2,993.15
	7/7/2020	163.00	82.54	NA	NA	2,992.90
	10/8/2020	163.00	82.85	NA	NA	2,992.59
NM-MW-12						
3,105.47	4/7/2017	98.54	96.70	NA	NA	3,008.77
	7/13/2017	NM	96.72	NA	NA	3,008.75
	10/3/2017	NM	96.69	NA	NA	3,008.78
	1/12/2018	NM	96.67	NA	NA	3,008.80
	4/2/2018	NM	96.71	NA	NA	3,008.76
	07/02/18	NM	96.68	NA	NA	3,008.79
	10/1/2018	NM	96.67	NA	NA	3,008.80
	1/7/2019	NM	96.51	NA	NA	3,008.96
	4/4/2019	NM	96.60	NA	NA	3,008.87
	7/8/2019	98.52	96.61	NA	NA	3,008.86
	10/7/2019	NM	96.64	NA	NA	3,008.83
	1/13/2020	98.55	97.63	NA	NA	3,007.84
	4/6/2020	98.78	96.57	NA	NA	3,008.90
	7/10/2020	98.35	96.64	NA	NA	3,008.83
	10/8/2020	98.52	96.61	NA	NA	3,008.86
NM-MW-13						
3,051.17	4/7/2017	111.80	84.04	NA	NA	2,967.13
	7/13/2017	NM	84.05	NA	NA	2,967.12
	10/3/2017	NM	84.10	NA	NA	2,967.07
	1/12/2018	NM	84.12	NA	NA	2,967.05
	4/2/2018	NM	84.15	NA	NA	2,967.02
	07/02/18	NM	84.15	NA	NA	2,967.02
	10/1/2018	NM	84.24	NA	NA	2,966.93
	1/7/2019	NM	84.15	NA	NA	2,967.02
	4/4/2019	NM	84.27	NA	NA	2,966.90
	7/8/2019	111.74	84.29	NA	NA	2,966.88
	10/8/2019	NM	84.37	NA	NA	2,966.80
	1/13/2020	NM	84.40	NA	NA	2,966.77
	4/6/2020	111.70	84.39	NA	NA	2,966.78
	7/7/2020	111.64	84.44	NA	NA	2,966.73
	10/8/2020	111.73	84.49	NA	NA	2,966.68

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
NM-MW-14						
3,126.82	2/17/2020	97.74	95.82	NA	NA	3,031.00
	4/6/2020	97.67	95.81	NA	NA	3,031.01
	7/9/2020	97.66	95.82	NA	NA	3,031.00
	10/8/2020	97.75	95.85	NA	NA	3,030.97
NM-MW-15						
3,064.93	2/17/2020	98.06	86.55	NA	NA	2,978.38
	4/6/2020	98.08	86.60	NA	NA	2,978.33
	7/7/2020	98.07	86.66	NA	NA	2,978.27
	10/8/2020	97.99	87.71	NA	NA	2,977.22
NM-MW-16						
3,085.99	2/17/2020	93.04	DRY	NA	NA	NA
	4/6/2020	93.04	DRY	NA	NA	NA
	7/7/2020	93.05	DRY	NA	NA	NA
	10/8/2020	93.10	93.06	NA	NA	2,992.93
NM-MW-17						
3,035.70	2/17/2020	86.71	58.34	NA	NA	2,977.36
	4/6/2020	86.70	58.36	NA	NA	2,977.34
	7/7/2020	86.74	58.43	NA	NA	2,977.27
	10/8/2020	86.73	58.52	NA	NA	2,977.18
NM-MW-20						
3,091.29	2/17/2020	97.76	93.23	NA	NA	2,998.06
	4/6/2020	97.81	93.29	NA	NA	2,998.00
	7/10/2020	97.76	93.37	NA	NA	2,997.92
	10/8/2020	97.77	93.39	NA	NA	2,997.90
NM-MW-21						
3,047.98	2/17/2020	78.48	76.46	NA	NA	2,971.52
	4/6/2020	78.48	76.50	NA	NA	2,971.48
	7/10/2020	78.48	76.53	NA	NA	2,971.45
	10/8/2020	78.49	76.57	NA	NA	2,971.41
Non-Remedial Wells						
Livermore						
NM	12/07/06	111.60	95.96	NA	NA	NA
	02/13/07	110.72	95.08	NA	NA	NA
	02/28/07	NM	95.08	NA	NA	NA
	07/30/07	110.72	95.71	NA	NA	NA
	07/09/08	110.72	94.89	NA	NA	NA
	01/28/09	110.81	94.81	NA	NA	NA
	08/28/09	111.11	95.08	NA	NA	NA
	02/19/10	NM	94.70	NA	NA	NA
	08/16/10	NM	94.67	NA	NA	NA
	02/11/11	NM	95.00	NA	NA	NA
	07/31/13	104.21	95.29	NA	NA	NA
	07/16/14	NM	95.85	NA	NA	NA
	01/25/16	104.23	95.20	NA	NA	NA
	07/21/16	NM	95.30	NA	NA	NA
	01/11/17	NM	95.10	NA	NA	NA
	07/13/17	NM	95.17	NA	NA	NA
	10/03/17	NM	95.27	NA	NA	NA
	01/12/18	NM	94.97	NA	NA	NA
	04/02/18	NM	94.97	NA	NA	NA
	07/02/18	NM	95.19	NA	NA	NA
	10/1/2018	NM	95.26	NA	NA	NA
	1/8/2019	NM	95.27	NA	NA	NA
	4/10/2019	NM	95.27	NA	NA	NA
	7/10/2019	NM	95.40	NA	NA	NA
	10/9/2019	NM	95.28	NA	NA	NA
	1/16/2020	NM	95.62	NA	NA	NA
	4/8/2020	99.81	95.42	NA	NA	NA
	7/6/2020	99.87	95.48	NA	NA	NA
	10/12/2020	99.77	95.52	NA	NA	NA
Pure Water Well						
3,151.80	08/16/12	104.80	88.00	NA	NA	3,063.80
	08/30/13	100.50	88.35	NA	NA	3,063.45
	07/14/15	NM	88.35	NA	NA	3,063.45

Appendix A

**Historical Groundwater Elevation Measurements
Chevron Dollarhide Unit
Dollarhide, Texas**

TOC Elevation (ft NAVD)	Date	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Groundwater Elevation (ft NAVD) ⁽¹⁾
RRR Ranch Windmill						
NM	08/28/09	117.05	95.05	NA	NA	NA
	07/22/16	NM	94.36	NA	NA	NA
	01/12/17	NM	94.28	NA	NA	NA
	07/13/17	99.61	94.37	NA	NA	NA
	10/03/17	NM	94.34	NA	NA	NA
	01/12/18	NM	94.24	NA	NA	NA
	04/02/18	NM	94.24	NA	NA	NA
	07/02/18	NM	94.14	NA	NA	NA
	10/1/2018	NM	94.08	NA	NA	NA
	1/7/2019	NM	93.95	NA	NA	NA
	4/4/2019	NM	93.95	NA	NA	NA
	7/8/2019	96.44	93.82	NA	NA	NA
	10/7/2019	NM	93.91	NA	NA	NA
	1/13/2020	NM	93.72	NA	NA	NA
	4/6/2020	96.60	93.69	NA	NA	NA
	7/9/2020	96.48	93.57	NA	NA	NA
	10/7/2020	96.33	93.55	NA	NA	NA
TRAC-4						
NM	NA	NM	NM	NA	NA	NA
TRAC-8						
NM	NA	NM	NM	NA	NA	NA
Wilson Ranch Well						
NM	NA	NM	NM	NA	NA	NA

Notes:

⁽¹⁾ Formula for Adjusted Groundwater Elevation: TOC - Depth to Water + 0.75 (LNAPL thickness).

ft = feet

NAVD = North American Vertical Datum

TOC = top of casing

LNAPL = light non-aqueous phase liquid

NM = Not Measured

NA = Not Applicable

Appendix B

Groundwater Sample Analytical Laboratory Reports

Certificate of Analysis Summary 666917

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 07.10.2020 16:05

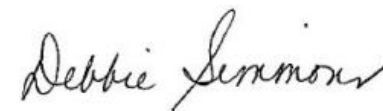
Report Date: 08.01.2020 12:23

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	666917-001	666917-002	666917-003	666917-004	666917-005	666917-006
	Field Id:	NM-MW-13-W-201007	NM-MW-11-W-201007	NM-MW-11-WD-20100	NM-MW-15-W-201007	NM-MW-20-W-201007	NM-MW-21-W-201007
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	07.10.2020 10:00	07.10.2020 10:30	07.10.2020 10:45	07.10.2020 11:00	07.10.2020 11:45	07.10.2020 12:15
Inorganic Anions by EPA 300/300.1	Extracted:	07.13.2020 16:50	07.13.2020 16:50	07.13.2020 16:50	07.13.2020 16:50	07.13.2020 16:50	07.13.2020 16:50
	Analyzed:	07.13.2020 22:37	07.13.2020 22:44	07.13.2020 22:50	07.13.2020 21:34	07.13.2020 22:56	07.13.2020 23:03
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		212 5.00	178 10.0	188 10.0	57.3 2.50	22.2 2.50	28.8 2.50
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		1130 5.00	2120 5.00	1920 5.00	509 5.00	377 5.00	524 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Certificate of Analysis Summary 666917

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

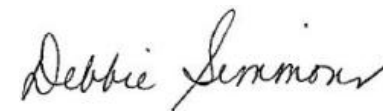
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 07.10.2020 16:05
 Report Date: 08.01.2020 12:23
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	666917-007	666917-008				
	Field Id:	NM-MW-17-W-201007	NM-MW-12-W-201007				
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER				
	Sampled:	07.10.2020 12:45	07.10.2020 13:30				
Inorganic Anions by EPA 300/300.1	Extracted:	07.13.2020 16:50	07.13.2020 16:50				
	Analyzed:	07.13.2020 23:22	07.13.2020 23:28				
	Units/RL:	mg/L RL	mg/L RL				
Chloride		211 5.00	589 5.00				
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 16:04	07.14.2020 16:04				
	Units/RL:	mg/L RL	mg/L RL				
Total Dissolved Solids		978 5.00	1270 5.00				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 666917

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

08.01.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.01.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **666917**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 666917. 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 Eurofins Xenco, LLC. 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. 666917 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 666917****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-13-W-201007	W	07.10.2020 10:00		666917-001
NM-MW-11-W-201007	W	07.10.2020 10:30		666917-002
NM-MW-11-WD-201007	W	07.10.2020 10:45		666917-003
NM-MW-15-W-201007	W	07.10.2020 11:00		666917-004
NM-MW-20-W-201007	W	07.10.2020 11:45		666917-005
NM-MW-21-W-201007	W	07.10.2020 12:15		666917-006
NM-MW-17-W-201007	W	07.10.2020 12:45		666917-007
NM-MW-12-W-201007	W	07.10.2020 13:30		666917-008
Wilson Ranch Well-W-201007	W	07.10.2020 13:45		Not Analyzed
Smith Residence	W	07.10.2020 14:15		Not Analyzed



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 666917

Report Date: 08.01.2020
Date Received: 07.10.2020

Sample receipt non conformances and comments:

Sample Wilson Ranch Well and Smith Residence not analyzed on this work order per Liz Whiddon.
(moved to work order 667969)

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 666917****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-13-W-201007**

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-001

Date Collected: 07.10.2020 10:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	212	5.00	0.210	mg/L	07.13.2020 22:37		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1130	5.00	5.00	mg/L	07.14.2020 16:04		1



Certificate of Analytical Results 666917

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-11-W-201007

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-002

Date Collected: 07.10.2020 10:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	178	10.0	0.421	mg/L	07.13.2020 22:44		20

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2120	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 666917****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-11-WD-201007**

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-003

Date Collected: 07.10.2020 10:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	188	10.0	0.421	mg/L	07.13.2020 22:50		20

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1920	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 666917****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-15-W-201007**

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-004

Date Collected: 07.10.2020 11:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.3	2.50	0.105	mg/L	07.13.2020 21:34		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	509	5.00	5.00	mg/L	07.14.2020 16:04		1



Certificate of Analytical Results 666917

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-20-W-201007

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-005

Date Collected: 07.10.2020 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.2	2.50	0.105	mg/L	07.13.2020 22:56		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	377	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 666917****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-21-W-201007**

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-006

Date Collected: 07.10.2020 12:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.8	2.50	0.105	mg/L	07.13.2020 23:03		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	524	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 666917****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-17-W-201007**

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-007

Date Collected: 07.10.2020 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	211	5.00	0.210	mg/L	07.13.2020 23:22		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	978	5.00	5.00	mg/L	07.14.2020 16:04		1



Certificate of Analytical Results 666917

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-12-W-201007

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 666917-008

Date Collected: 07.10.2020 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	589	5.00	0.210	mg/L	07.13.2020 23:28		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1270	5.00	5.00	mg/L	07.14.2020 16:04		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131511

Matrix: Water

Prep Method: E300P

Date Prep: 07.13.2020

MB Sample Id: 7707251-1-BLK

LCS Sample Id: 7707251-1-BKS

LCSD Sample Id: 7707251-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	26.1	104	26.1	104	90-110	0	20	mg/L	07.13.2020 21:21	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.13.2020

Parent Sample Id: 666917-004

MS Sample Id: 666917-004 S

MSD Sample Id: 666917-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	57.3	125	189	105	189	105	90-110	0	20	mg/L	07.13.2020 21:40	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.13.2020

Parent Sample Id: 666917-006

MS Sample Id: 666917-006 S

MSD Sample Id: 666917-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	28.8	125	161	106	162	107	90-110	1	20	mg/L	07.13.2020 23:09	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Water

MB Sample Id: 3131946-1-BLK

LCS Sample Id: 3131946-1-BKS

LCSD Sample Id: 3131946-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	998	100	998	100	80-120	0	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Ground Water

Parent Sample Id: 666917-001

MD Sample Id: 666917-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1130	1120	1	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Ground Water

Parent Sample Id: 667041-001

MD Sample Id: 667041-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8020	8120	1	10	mg/L	07.14.2020 16:04	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: W040917

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 505-3334
 Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

www.xenco.com Page _____ of _____

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

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.Knight@gnd.com & Brittany.White@gnd.com & eds@gnd.com

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

Project Name:	Dollarhide	Turn Around	☐
Project Number:	55270	Routine	☐
P.O. Number:		Rush:	
Sampler's Name:	Ryan Little	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	83.19	Thermometer ID: 42-3				
Received Intact:	Yes	No	Correction Factor: 7.44			
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seals:	Yes	No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS	ANALYSIS REQUEST										Work Order Notes	
Nm-mw-13-w-201007 GW	10-31-20	1030	1030	1	X	X													TAT starts the day received by the lab, if received by 4:30pm
Nm-mw-11-w-201007	10-31-20	1035			X														
Nm-mw-11-w-201007	10-31-20	1045			X														
Nm-mw-15-w-201007	11-00				X														
Nm-mw-20-w-201007	1145				X														
Nm-mw-24-w-201007	1215				X														
Nm-mw-17-w-201007	1245				X														
Nm-mw-12-w-201007	1330				X														
Nm-mw-12-w-201007	1345				X														
Nm-mw-12-w-201007	1415				X														

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/10/20			2
					4
					6

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.10.2020 04.05.00 PM

Work Order #: 666917

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.9
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

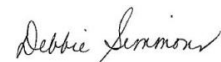
Checklist completed by:



Brianna Teel

Date: 07.10.2020

Checklist reviewed by:



Debbie Simmons

Date: 07.10.2020

Certificate of Analysis Summary 667041

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Mon 07.13.2020 16:23

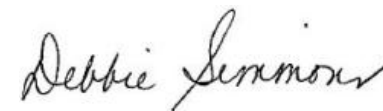
Report Date: 07.26.2020 15:00

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667041-001	667041-002	667041-003	667041-004	667041-005	667041-006
	Field Id:	44-J-4-MW-W-201307	44-J-1-MW-W-201307	44-J-2-MW-W-201307	44-J-3-MW-W-201307	44-5-5-MW-W-201307	44-1-1-MW-W-201307
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	07.13.2020 10:00	07.13.2020 10:45	07.13.2020 11:00	07.13.2020 10:15	07.13.2020 10:30	07.13.2020 11:15
Inorganic Anions by EPA 300/300.1	Extracted:	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15
	Analyzed:	07.14.2020 23:01	07.14.2020 23:09	07.14.2020 23:18	07.14.2020 23:51	07.15.2020 00:00	07.15.2020 00:25
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		4450 25.0	4770 25.0	5120 25.0	4920 25.0	4190 25.0	3660 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		8020 5.00	7880 5.00	8210 5.00	8080 5.00	6690 5.00	5840 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Certificate of Analysis Summary 667041

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Mon 07.13.2020 16:23

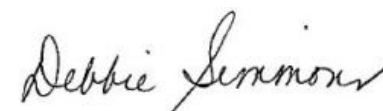
Report Date: 07.26.2020 15:00

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667041-007	667041-008	667041-009	667041-010	667041-011	667041-012
	Field Id:	45-FF-MW-W-201307	45-E-2-MW-W-201307	45-E-1-MW-W-201307	45-F-1-MW-W-201307	MW-20-W-201307	NM-MW-10-W-201307
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	07.13.2020 11:30	07.13.2020 11:45	07.13.2020 12:00	07.13.2020 12:15	07.13.2020 12:30	07.13.2020 12:45
Inorganic Anions by EPA 300/300.1	Extracted:	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15	07.14.2020 15:15
	Analyzed:	07.15.2020 00:34	07.15.2020 00:42	07.15.2020 00:51	07.15.2020 00:59	07.15.2020 01:07	07.15.2020 01:16
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		4120 25.0	1750 25.0	3100 25.0	1130 10.0	1320 10.0	366 5.00
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 16:04	07.14.2020 17:00	07.14.2020 17:00
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		6850 5.00	3150 5.00	5540 5.00	1960 5.00	2450 5.00	1650 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Certificate of Analysis Summary 667041

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

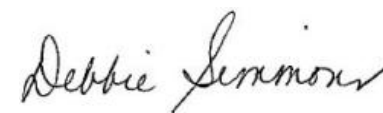
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Mon 07.13.2020 16:23
 Report Date: 07.26.2020 15:00
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667041-013	667041-014	667041-015			
	Field Id:	NM-MW-9-W-201307	45-E3-MW-W-201307	43-K-1-MW-W-201307			
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER			
	Sampled:	07.13.2020 13:00	07.13.2020 13:30	07.13.2020 13:45			
Inorganic Anions by EPA 300/300.1	Extracted:	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40			
	Analyzed:	07.15.2020 11:30	07.15.2020 11:36	07.15.2020 11:42			
	Units/RL:	mg/L RL	mg/L RL	mg/L RL			
Chloride		271 2.50	5690 25.0	7440 25.0			
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00			
	Units/RL:	mg/L RL	mg/L RL	mg/L RL			
Total Dissolved Solids		852 5.00	8480 5.00	10700 5.00			

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 667041

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

07.26.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.26.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **667041**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 667041. 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 Eurofins Xenco, LLC. 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. 667041 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
44-J-4-MW-W-201307	W	07.13.2020 10:00		667041-001
44-J-1-MW-W-201307	W	07.13.2020 10:45		667041-002
44-J-2-MW-W-201307	W	07.13.2020 11:00		667041-003
44-J-3-MW-W-201307	W	07.13.2020 10:15		667041-004
44-5-5-MW-W-201307	W	07.13.2020 10:30		667041-005
44-1-1-MW-W-201307	W	07.13.2020 11:15		667041-006
45-FF-MW-W-201307	W	07.13.2020 11:30		667041-007
45-E-2-MW-W-201307	W	07.13.2020 11:45		667041-008
45-E-1-MW-W-201307	W	07.13.2020 12:00		667041-009
45-F-1-MW-W-201307	W	07.13.2020 12:15		667041-010
MW-20-W-201307	W	07.13.2020 12:30		667041-011
NM-MW-10-W-201307	W	07.13.2020 12:45		667041-012
NM-MW-9-W-201307	W	07.13.2020 13:00		667041-013
45-E3-MW-W-201307	W	07.13.2020 13:30		667041-014
43-K-1-MW-W-201307	W	07.13.2020 13:45		667041-015



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 667041

Report Date: 07.26.2020
Date Received: 07.13.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **44-J-4-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-001

Date Collected: 07.13.2020 10:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4450	25.0	1.05	mg/L	07.14.2020 23:01		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8020	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **44-J-1-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-002

Date Collected: 07.13.2020 10:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4770	25.0	1.05	mg/L	07.14.2020 23:09		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	7880	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **44-J-2-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-003

Date Collected: 07.13.2020 11:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5120	25.0	1.05	mg/L	07.14.2020 23:18		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8210	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **44-J-3-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-004

Date Collected: 07.13.2020 10:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4920	25.0	1.05	mg/L	07.14.2020 23:51		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8080	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **44-5-5-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-005

Date Collected: 07.13.2020 10:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4190	25.0	1.05	mg/L	07.15.2020 00:00		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6690	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **44-1-1-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-006

Date Collected: 07.13.2020 11:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3660	25.0	1.05	mg/L	07.15.2020 00:25		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5840	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **45-FF-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-007

Date Collected: 07.13.2020 11:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4120	25.0	1.05	mg/L	07.15.2020 00:34		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6850	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **45-E-2-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-008

Date Collected: 07.13.2020 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1750	25.0	1.05	mg/L	07.15.2020 00:42		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3150	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **45-E-1-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-009

Date Collected: 07.13.2020 12:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3100	25.0	1.05	mg/L	07.15.2020 00:51		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5540	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **45-F-1-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-010

Date Collected: 07.13.2020 12:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	10.0	0.421	mg/L	07.15.2020 00:59		20

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1960	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-20-W-201307** Matrix: Ground Water Date Received: 07.13.2020 16:23
Lab Sample Id: 667041-011 Date Collected: 07.13.2020 12:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.14.2020 15:15
Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	10.0	0.421	mg/L	07.15.2020 01:07		20

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131947

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2450	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-10-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-012

Date Collected: 07.13.2020 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.14.2020 15:15

Seq Number: 3131649

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	366	5.00	0.210	mg/L	07.15.2020 01:16		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1650	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-9-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-013

Date Collected: 07.13.2020 13:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	271	2.50	0.105	mg/L	07.15.2020 11:30		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	852	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **45-E3-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-014

Date Collected: 07.13.2020 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5690	25.0	1.05	mg/L	07.15.2020 11:36		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8480	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667041****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **43-K-1-MW-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667041-015

Date Collected: 07.13.2020 13:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7440	25.0	1.05	mg/L	07.15.2020 11:42		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	10700	5.00	5.00	mg/L	07.14.2020 17:00		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131649

Matrix: Water

Prep Method: E300P

Date Prep: 07.14.2020

MB Sample Id: 7707315-1-BLK

LCS Sample Id: 7707315-1-BKS

LCSD Sample Id: 7707315-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	27.0	108	27.2	109	90-110	1	20	mg/L	07.14.2020 21:11	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Water

Prep Method: E300P

Date Prep: 07.15.2020

MB Sample Id: 7707378-1-BLK

LCS Sample Id: 7707378-1-BKS

LCSD Sample Id: 7707378-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	25.9	104	26.0	104	90-110	0	20	mg/L	07.15.2020 09:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131649

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.14.2020

Parent Sample Id: 667046-001

MS Sample Id: 667046-001 S

MSD Sample Id: 667046-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	18.5	25.0	45.6	108	45.2	107	90-110	1	20	mg/L	07.14.2020 21:36	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131649

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.14.2020

Parent Sample Id: 667047-001

MS Sample Id: 667047-001 S

MSD Sample Id: 667047-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.9	25.0	41.1	117	39.6	111	90-110	4	20	mg/L	07.14.2020 23:35	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667045-001

MS Sample Id: 667045-001 S

MSD Sample Id: 667045-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.23	25.0	34.8	102	35.0	103	90-110	1	20	mg/L	07.15.2020 10:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667140-003

MS Sample Id: 667140-003 S

MSD Sample Id: 667140-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	321	250	576	102	575	102	90-110	0	20	mg/L	07.15.2020 12:49	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Water

MB Sample Id: 3131946-1-BLK

LCS Sample Id: 3131946-1-BKS

LCSD Sample Id: 3131946-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	998	100	998	100	80-120	0	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Water

MB Sample Id: 3131947-1-BLK

LCS Sample Id: 3131947-1-BKS

LCSD Sample Id: 3131947-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	998	100	996	100	80-120	0	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Ground Water

Parent Sample Id: 666917-001

MD Sample Id: 666917-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1130	1120	1	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Ground Water

Parent Sample Id: 667041-001

MD Sample Id: 667041-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8020	8120	1	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Ground Water

Parent Sample Id: 667041-011

MD Sample Id: 667041-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	2450	2460	0	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Ground Water

Parent Sample Id: 667139-005

MD Sample Id: 667139-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	811	805	1	10	mg/L	07.14.2020 17:00	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



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

Chain of Custody

Work Order No:

067041

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apivivoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX 79703	City, State ZIP:	Niagara Falls, NY 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher Knight@gnd.com & Brittany White@gnd.com & edds@gnd.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:	Dollarhide	Turn Around																	Work Order Notes				
Project Number:	55270	Route: ☐																	TAT starts the day received by the lab, if received by 4:30pm Sample Comments				
P.O. Number:		Rush:																					
Sampler's Name:	Ryd Lingle	Due Date:																					
SAMPLE RECEIPT Temperature (°C): U-4/102 Thermometer ID: 22-2 Received Intact: Yes No ☒ Correction Factor: -0.4 Cooler Custody Seals: Yes No ☒ Total Containers: 1 Sample Custody Seals: Yes No ☒																							
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS																
44-S-4-mw-w-201307	GW	3/30/20	1000		1	X	X																
44-S-1-mw-w-201307			1045																				
44-S-2-mw-w-201307			1160																				
44-S-3-mw-w-201307			1615																				
44-S-5-mw-w-201307			1030																				
44-1-1-mw-w-201307			1115																				
45-FE-mw-w-201307			1130																				
45-E-2-mw-w-201307			1145																				
45-E-1-mw-w-201307			1700																				
45-F-1-mw-w-201307			1215																				

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [Signature]	[Signature]	7/13	2 [Signature]		
3 [Signature]			4 [Signature]		
5 [Signature]			6 [Signature]		



Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3333
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 888-8888
Hobbs, NM (575-392-7550)

Work Order No

1007641

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Page 7 of 7

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:		Dollar/ride	Turn Around		ANALYSIS REQUEST																Work Order Notes						
Project Number:		55270	Routine ☐		Routine Rush:		Due Date:																				
P.O. Number:																											
Sampler's Name:		Kyd Lvinge																		Due Date:							
SAMPLE RECEIPT					Temp Blank:		Yes	No	Wet Ice:		Yes	No															
Temperature (°C):					0.8°C				Thermometer ID																		
Received Intact:					Yes		No			Correction Factor:		0.4															
Cooler Custody Seals:					Yes		No	N/A		Total Containers:																	
Sample Custody Seals:					Yes		No	N/A																			
Sample Identification				Matrix	Date Sampled	Time Sampled		Depth																	Sample Comments		
MWS-70-15-201307				GW	13-5-170	1230			1																		
NIM-MWS-10-15-201307						1245			X																		
NIM-MWS-9-15-201307						1300			X																		
MWS-14-15-201307						1315																					
45-EP-MWS-15-201307						1330																					
43-K-1-MWS-15-201307						1345																					
</																											

[illegible]

Date/Time

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.13.2020 04.23.00 PM

Work Order #: 667041

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

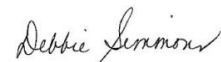
Checklist completed by:



Brianna Teel

Date: 07.13.2020

Checklist reviewed by:



Debbie Simmons

Date: 07.14.2020

Certificate of Analysis Summary 667042

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

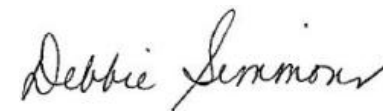
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Mon 07.13.2020 16:23
 Report Date: 07.26.2020 15:00
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667042-001					
	Field Id:	NM-MW-14-W-201307					
	Depth:						
	Matrix:	GROUND WATER					
	Sampled:	07.13.2020 13:15					
Inorganic Anions by EPA 300/300.1	Extracted:	07.15.2020 09:40					
	Analyzed:	07.15.2020 11:48					
	Units/RL:	mg/L RL					
Chloride		25.0 2.50					
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 17:00					
	Units/RL:	mg/L RL					
Total Dissolved Solids		488 5.00					

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 667042

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

07.26.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.26.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **667042**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 667042. 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 Eurofins Xenco, LLC. 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. 667042 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 667042

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-14-W-201307	W	07.13.2020 13:15		667042-001



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 667042

Report Date: 07.26.2020
Date Received: 07.13.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 667042****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-14-W-201307**

Matrix: Ground Water

Date Received: 07.13.2020 16:23

Lab Sample Id: 667042-001

Date Collected: 07.13.2020 13:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.0	2.50	0.105	mg/L	07.15.2020 11:48		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	488	5.00	5.00	mg/L	07.14.2020 17:00		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Water

Prep Method: E300P

Date Prep: 07.15.2020

MB Sample Id: 7707378-1-BLK

LCS Sample Id: 7707378-1-BKS

LCSD Sample Id: 7707378-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	25.9	104	26.0	104	90-110	0	20	mg/L	07.15.2020 09:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667045-001

MS Sample Id: 667045-001 S

MSD Sample Id: 667045-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.23	25.0	34.8	102	35.0	103	90-110	1	20	mg/L	07.15.2020 10:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667140-003

MS Sample Id: 667140-003 S

MSD Sample Id: 667140-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	321	250	576	102	575	102	90-110	0	20	mg/L	07.15.2020 12:49	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Water

MB Sample Id: 3131947-1-BLK

LCS Sample Id: 3131947-1-BKS

LCSD Sample Id: 3131947-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	998	100	996	100	80-120	0	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Ground Water

Parent Sample Id: 667041-011

MD Sample Id: 667041-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	2450	2460	0	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Ground Water

Parent Sample Id: 667139-005

MD Sample Id: 667139-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	811	805	1	10	mg/L	07.14.2020 17:00	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

10704

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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 (813-291-1111)

Page _____ of _____
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Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.Knight@gnd.com & Brittany.White@gnd.com & eds@gnd.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: _____	

[illegible]

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.13.2020 04.23.00 PM

Work Order #: 667042

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

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?	Yes
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

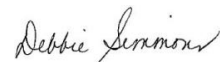
Checklist completed by:



Brianna Teel

Date: 07.13.2020

Checklist reviewed by:



Debbie Simmons

Date: 07.14.2020

Certificate of Analysis Summary 667139



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 07.14.2020 15:08

Report Date: 07.26.2020 14:59

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667139-001	667139-002	667139-003	667139-004	667139-005	667139-006
	Field Id:	NM-MW-7-W-201407	RRR Ranch Windmill-W-	NM-MW-4-W-201407	NM-MW-8-W-201407	NM-MW-3-W-201407	NM-MW-2-W-201407
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	07.14.2020 10:00	07.14.2020 10:10	07.14.2020 10:20	07.14.2020 10:30	07.14.2020 10:40	07.14.2020 10:50
Inorganic Anions by EPA 300/300.1	Extracted:	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40
	Analyzed:	07.15.2020 13:08	07.15.2020 13:26	07.15.2020 13:32	07.15.2020 13:38	07.15.2020 13:44	07.15.2020 13:51
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		2360 25.0	1930 25.0	46.9 2.50	6540 50.0	261 2.50	696 5.00
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		5250 5.00	4490 5.00	419 5.00	12400 5.00	811 5.00	1530 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 667139



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 07.14.2020 15:08

Report Date: 07.26.2020 14:59

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667139-007	667139-008	667139-009	667139-010	667139-011	667139-012
	Field Id:	NM-MW-1-W-201407	NM-MW-5-W-201407	NM-MW-6-W-201407	58-B-3-MW-W-201407	MW-29-W-201407	MW-28-W-201407
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	07.14.2020 11:00	07.14.2020 11:10	07.14.2020 11:20	07.14.2020 11:30	07.14.2020 12:30	07.14.2020 12:40
Inorganic Anions by EPA 300/300.1	Extracted:	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 12:10	07.15.2020 12:10	07.15.2020 12:10	07.15.2020 12:10
	Analyzed:	07.15.2020 13:57	07.15.2020 14:03	07.15.2020 15:10	07.15.2020 15:16	07.15.2020 15:22	07.15.2020 15:28
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		293 5.00	162 5.00	152 2.50	1640 25.0	563 5.00	3370 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00	07.14.2020 17:00
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		1450 5.00	1250 5.00	828 5.00	3160 5.00	1460 5.00	6510 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 667139



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 07.14.2020 15:08

Report Date: 07.26.2020 14:59

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667139-013	667139-014	667139-015	667139-016	667139-017	
	Field Id:	MW-8-W-201407	MW-9-W-201407	58-B-1-MW-W-201407	58-2-MW-W-201407	DHU-FWS-W-201407	
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	
	Sampled:	07.14.2020 12:50	07.14.2020 13:00	07.14.2020 13:20	07.14.2020 13:30	07.14.2020 13:40	
Inorganic Anions by EPA 300/300.1	Extracted:	07.15.2020 12:10	07.15.2020 12:10	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40	
	Analyzed:	07.15.2020 15:51	07.15.2020 15:57	07.15.2020 12:12	07.15.2020 12:18	07.15.2020 12:25	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	
Chloride		1010 10.0	2700 25.0	7160 25.0	4040 25.0	628 25.0	
TDS by SM2540C	Extracted:						
	Analyzed:	07.14.2020 17:00	07.14.2020 17:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	
Total Dissolved Solids		2460 5.00	5070 5.00	11400 5.00	7190 5.00	3120 5.00	

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Analytical Report 667139

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

07.26.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.26.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **667139**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 667139. 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 Eurofins Xenco, LLC. 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. 667139 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-7-W-201407	W	07.14.2020 10:00		667139-001
RRR Ranch Windmill-W-201407	W	07.14.2020 10:10		667139-002
NM-MW-4-W-201407	W	07.14.2020 10:20		667139-003
NM-MW-8-W-201407	W	07.14.2020 10:30		667139-004
NM-MW-3-W-201407	W	07.14.2020 10:40		667139-005
NM-MW-2-W-201407	W	07.14.2020 10:50		667139-006
NM-MW-1-W-201407	W	07.14.2020 11:00		667139-007
NM-MW-5-W-201407	W	07.14.2020 11:10		667139-008
NM-MW-6-W-201407	W	07.14.2020 11:20		667139-009
58-B-3-MW-W-201407	W	07.14.2020 11:30		667139-010
MW-29-W-201407	W	07.14.2020 12:30		667139-011
MW-28-W-201407	W	07.14.2020 12:40		667139-012
MW-8-W-201407	W	07.14.2020 12:50		667139-013
MW-9-W-201407	W	07.14.2020 13:00		667139-014
58-B-1-MW-W-201407	W	07.14.2020 13:20		667139-015
58-2-MW-W-201407	W	07.14.2020 13:30		667139-016
DHU-FWS-W-201407	W	07.14.2020 13:40		667139-017



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 667139

Report Date: 07.26.2020
Date Received: 07.14.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-7-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-001

Date Collected: 07.14.2020 10:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2360	25.0	1.05	mg/L	07.15.2020 13:08		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5250	5.00	5.00	mg/L	07.14.2020 17:00		1



Certificate of Analytical Results 667139

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **RRR Ranch Windmill-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
 Lab Sample Id: 667139-002 Date Collected: 07.14.2020 10:10
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.15.2020 09:40
 Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1930	25.0	1.05	mg/L	07.15.2020 13:26		50

Analytical Method: TDS by SM2540C
 Tech: SPC
 Analyst: SPC
 Seq Number: 3131947

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4490	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-4-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-003

Date Collected: 07.14.2020 10:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.9	2.50	0.105	mg/L	07.15.2020 13:32		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	419	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-8-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-004

Date Collected: 07.14.2020 10:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6540	50.0	2.10	mg/L	07.15.2020 13:38		100

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	12400	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-3-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-005

Date Collected: 07.14.2020 10:40

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	261	2.50	0.105	mg/L	07.15.2020 13:44		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	811	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-2-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-006

Date Collected: 07.14.2020 10:50

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	696	5.00	0.210	mg/L	07.15.2020 13:51		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1530	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-1-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-007

Date Collected: 07.14.2020 11:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	293	5.00	0.210	mg/L	07.15.2020 13:57		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1450	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-5-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-008

Date Collected: 07.14.2020 11:10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	162	5.00	0.210	mg/L	07.15.2020 14:03		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1250	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **NM-MW-6-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-009

Date Collected: 07.14.2020 11:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 12:10

Seq Number: 3131797

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	152	2.50	0.105	mg/L	07.15.2020 15:10		5

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	828	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **58-B-3-MW-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-010

Date Collected: 07.14.2020 11:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 12:10

Seq Number: 3131797

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1640	25.0	1.05	mg/L	07.15.2020 15:16		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3160	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-29-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667139-011 Date Collected: 07.14.2020 12:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 12:10
Seq Number: 3131797

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	563	5.00	0.210	mg/L	07.15.2020 15:22		10

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1460	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-28-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667139-012 Date Collected: 07.14.2020 12:40
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 12:10
Seq Number: 3131797

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3370	25.0	1.05	mg/L	07.15.2020 15:28		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131947

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6510	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-8-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667139-013 Date Collected: 07.14.2020 12:50
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 12:10
Seq Number: 3131797

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1010	10.0	0.421	mg/L	07.15.2020 15:51		20

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131947

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2460	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-9-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667139-014 Date Collected: 07.14.2020 13:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 12:10
Seq Number: 3131797

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2700	25.0	1.05	mg/L	07.15.2020 15:57		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131947

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5070	5.00	5.00	mg/L	07.14.2020 17:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **58-B-1-MW-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-015

Date Collected: 07.14.2020 13:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7160	25.0	1.05	mg/L	07.15.2020 12:12		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	11400	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **58-2-MW-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-016

Date Collected: 07.14.2020 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4040	25.0	1.05	mg/L	07.15.2020 12:18		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	7190	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667139****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **DHU-FWS-W-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667139-017

Date Collected: 07.14.2020 13:40

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	628	25.0	1.05	mg/L	07.15.2020 12:25		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3120	5.00	5.00	mg/L	07.15.2020 14:00		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Water

Prep Method: E300P

Date Prep: 07.15.2020

MB Sample Id: 7707378-1-BLK

LCS Sample Id: 7707378-1-BKS

LCSD Sample Id: 7707378-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	25.9	104	26.0	104	90-110	0	20	mg/L	07.15.2020 09:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131797

Matrix: Water

Prep Method: E300P

Date Prep: 07.15.2020

MB Sample Id: 7707379-1-BLK

LCS Sample Id: 7707379-1-BKS

LCSD Sample Id: 7707379-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	26.8	107	26.9	108	90-110	0	20	mg/L	07.15.2020 14:29	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667045-001

MS Sample Id: 667045-001 S

MSD Sample Id: 667045-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.23	25.0	34.8	102	35.0	103	90-110	1	20	mg/L	07.15.2020 10:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667140-003

MS Sample Id: 667140-003 S

MSD Sample Id: 667140-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	321	250	576	102	575	102	90-110	0	20	mg/L	07.15.2020 12:49	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131797

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667142-001

MS Sample Id: 667142-001 S

MSD Sample Id: 667142-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	49.7	25.0	75.2	102	74.3	98	90-110	1	20	mg/L	07.15.2020 14:54	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131797

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667143-001

MS Sample Id: 667143-001 S

MSD Sample Id: 667143-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.3	25.0	48.0	107	47.8	106	90-110	0	20	mg/L	07.15.2020 16:30	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Water

MB Sample Id: 3131947-1-BLK

LCS Sample Id: 3131947-1-BKS

LCSD Sample Id: 3131947-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	998	100	996	100	80-120	0	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Water

MB Sample Id: 3131948-1-BLK

LCS Sample Id: 3131948-1-BKS

LCSD Sample Id: 3131948-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	996	100	975	98	80-120	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Ground Water

Parent Sample Id: 667041-011

MD Sample Id: 667041-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	2450	2460	0	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131947

Matrix: Ground Water

Parent Sample Id: 667139-005

MD Sample Id: 667139-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	811	805	1	10	mg/L	07.14.2020 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Ground Water

Parent Sample Id: 667139-015

MD Sample Id: 667139-015 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	11400	11200	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Water

Parent Sample Id: 667340-004

MD Sample Id: 667340-004 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	9130	9300	2	10	mg/L	07.15.2020 14:00	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

067139

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 565-3443 Lubbock, TX (806) 794-1296
 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:	Nick Casten	Bill to: (if different)	Gina Blair - Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX 79703	City, State ZIP:	Niagara Falls, NY 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.Knight@gnd.com & Britany.White@gnd.com & eds@gnd.com

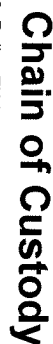
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	Work Order Comments
State of Project:	
Reporting Level: I ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☒ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Dollarhide	Turn Around	ANALYSIS REQUEST																Work Order Notes			
Project Number:	55270	Routine ☐																				
P.O. Number:		Rush:																				
Sampler's Name:	Lydia Linde	Due Date:																				
SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐																	
Temperature (°C):	-0.4	Thermometer ID																				
Received Intact:	Yes ☒ No ☐	Correction Factor:																				
Cooler Custody Seals:	Yes ☐ No ☒	Total Containers:																				
Sample Custody Seals:	Yes ☐ No ☒																					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS											TAT starts the day received by the lab, if received by 4:30pm				
DM-W-3-3-201407	GW	11/3/20	1000		1																	
RED Black W/Inch 1-2-201407			1010																			
DM-W-4-3-201407			1025																			
DM-W-8-3-201407			1030																			
DM-W-3-3-201407			1040																			
DM-W-2-3-201407			1050																			
DM-W-1-3-201407			1100																			
DM-W-5-3-201407			1110																			
DM-W-6-3-201407			1120																			
58-B-3-3-201407			1130																			

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/14/20			



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

Work Order No:

1001309

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

[illegible]

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		2/14-26	2		
3			4		
5		1/26	6		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.14.2020 03.08.00 PM

Work Order #: 667139

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-.4
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

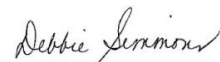
Checklist completed by:



Brianna Teel

Date: 07.14.2020

Checklist reviewed by:



Debbie Simmons

Date: 07.15.2020

Certificate of Analysis Summary 667140



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
Contact: Nick Casten
Project Location: New Mexico

Date Received in Lab: Tue 07.14.2020 15:08
Report Date: 07.26.2020 15:00
Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667140-001	667140-002	667140-003	667140-004		
	Field Id:	MW-34-W-201407	MW-33-W-201407	MW-32-W-201407	MW-32-WD-201407		
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER		
	Sampled:	07.14.2020 11:40	07.14.2020 11:50	07.14.2020 12:00	07.14.2020 12:00		
Inorganic Anions by EPA 300/300.1	Extracted:	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40	07.15.2020 09:40		
	Analyzed:	07.15.2020 12:31	07.15.2020 12:37	07.15.2020 12:43	07.15.2020 13:01		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Chloride		71.3 2.50	196 5.00	321 5.00	302 5.00		
TDS by SM2540C	Extracted:						
	Analyzed:	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Total Dissolved Solids		613 5.00	1060 5.00	1140 5.00	1020 5.00		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Analytical Report 667140

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

07.26.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.26.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **667140**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 667140. 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 Eurofins Xenco, LLC. 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. 667140 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 667140

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-34-W-201407	W	07.14.2020 11:40		667140-001
MW-33-W-201407	W	07.14.2020 11:50		667140-002
MW-32-W-201407	W	07.14.2020 12:00		667140-003
MW-32-WD-201407	W	07.14.2020 12:00		667140-004



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 667140

Report Date: 07.26.2020
Date Received: 07.14.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 667140****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-34-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667140-001 Date Collected: 07.14.2020 11:40
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 09:40
Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	71.3	2.50	0.105	mg/L	07.15.2020 12:31		5

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131948

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	613	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667140****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-33-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667140-002 Date Collected: 07.14.2020 11:50
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 09:40
Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	196	5.00	0.210	mg/L	07.15.2020 12:37		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131948

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1060	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667140****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-32-W-201407** Matrix: Ground Water Date Received: 07.14.2020 15:08
Lab Sample Id: 667140-003 Date Collected: 07.14.2020 12:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.15.2020 09:40
Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	321	5.00	0.210	mg/L	07.15.2020 12:43		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131948

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1140	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667140****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-32-WD-201407**

Matrix: Ground Water

Date Received: 07.14.2020 15:08

Lab Sample Id: 667140-004

Date Collected: 07.14.2020 12:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.15.2020 09:40

Seq Number: 3131791

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	302	5.00	0.210	mg/L	07.15.2020 13:01		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1020	5.00	5.00	mg/L	07.15.2020 14:00		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Water

Prep Method: E300P

Date Prep: 07.15.2020

MB Sample Id: 7707378-1-BLK

LCS Sample Id: 7707378-1-BKS

LCSD Sample Id: 7707378-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	25.9	104	26.0	104	90-110	0	20	mg/L	07.15.2020 09:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667045-001

MS Sample Id: 667045-001 S

MSD Sample Id: 667045-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.23	25.0	34.8	102	35.0	103	90-110	1	20	mg/L	07.15.2020 10:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131791

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.15.2020

Parent Sample Id: 667140-003

MS Sample Id: 667140-003 S

MSD Sample Id: 667140-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	321	250	576	102	575	102	90-110	0	20	mg/L	07.15.2020 12:49	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Water

MB Sample Id: 3131948-1-BLK

LCS Sample Id: 3131948-1-BKS

LCSD Sample Id: 3131948-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	996	100	975	98	80-120	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Ground Water

Parent Sample Id: 667139-015

MD Sample Id: 667139-015 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	11400	11200	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Water

Parent Sample Id: 667340-004

MD Sample Id: 667340-004 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	9130	9300	2	10	mg/L	07.15.2020 14:00	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

067140

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0350 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)

Page 1 of 1
www.xenco.com

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc.- 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick.Casten@gnd.com & Christopher.Knight@gnd.com & Brittany.White@gnd.com & eds@gnd.com

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

Project Name:	Dollarhide	Turn Around
Project Number:	55270	Routine ☒
P.O. Number:		Rush:
Sampler's Name:	Lydia Livingston	Due Date:

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	-04				Thermometer ID		
Received Intact:	Yes	No					
Coder Custody Seals:	Yes	No	NA		Correction Factor:	-04	
Sample Custody Seals:	Yes	No	NA		Total Containers:		

[illegible][illegible]

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/14/20			
		7/30/20			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.14.2020 03.08.00 PM

Work Order #: 667140

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-.4
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

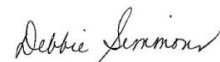
Checklist completed by:



Brianna Teel

Date: 07.14.2020

Checklist reviewed by:



Debbie Simmons

Date: 07.15.2020

Certificate of Analysis Summary 667340



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Wed 07.15.2020 16:34

Report Date: 08.01.2020 12:47

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667340-001	667340-002	667340-003	667340-004	667340-005	667340-006
	Field Id:	MW-27-W-201507	MW-10-W-201507	MW-26-W-201507	MW-24-W-201507	MW-19-W-201507	MW-18-W-201507
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	07.15.2020 09:10	07.15.2020 09:20	07.15.2020 09:30	07.15.2020 09:40	07.15.2020 09:50	07.15.2020 10:00
Inorganic Anions by EPA 300/300.1	Extracted:	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15
	Analyzed:	07.17.2020 14:00	07.17.2020 14:06	07.17.2020 14:13	07.17.2020 14:19	07.18.2020 16:59	07.17.2020 14:47
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		2950 25.0	5130 25.0	1480 25.0	4430 25.0	7880 50.0	21400 100
TDS by SM2540C	Extracted:						
	Analyzed:	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		5120 5.00	9450 5.00	3520 5.00	9130 5.00	13700 5.00	36000 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 667340



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Wed 07.15.2020 16:34

Report Date: 08.01.2020 12:47

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667340-007	667340-008	667340-009	667340-010	667340-011	667340-012
	Field Id:	MW-25-W-201507	MW-25-WD-201507	MW-12-W-201507	MW-31-W-201507	MW-11-W-201507	MW-6-W-201507
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	07.15.2020 10:15	07.15.2020 10:15	07.15.2020 10:30	07.15.2020 10:45	07.15.2020 11:00	07.15.2020 11:15
Inorganic Anions by EPA 300/300.1	Extracted:	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15
	Analyzed:	07.17.2020 14:53	07.17.2020 15:00	07.17.2020 15:06	07.17.2020 15:36	07.17.2020 15:42	07.17.2020 16:05
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		26100 100	24000 100	12700 50.0	8890 50.0	6240 50.0	417 5.00
TDS by SM2540C	Extracted:						
	Analyzed:	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00	07.15.2020 14:00
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		37300 5.00	36600 5.00	22700 5.00	17800 5.00	12000 5.00	1590 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 667340



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Wed 07.15.2020 16:34

Report Date: 08.01.2020 12:47

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667340-013	667340-014	667340-015	667340-016	667340-017	667340-018
	Field Id:	MW-5-W-201507	MW-4-W-201507	MW-3-W-201507	MW-14-W-201507	MW-13-W-201507	MW-15-W-201507
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	07.15.2020 11:30	07.15.2020 11:45	07.15.2020 12:00	07.15.2020 12:15	07.15.2020 12:30	07.15.2020 12:45
Inorganic Anions by EPA 300/300.1	Extracted:	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15	07.17.2020 12:15
	Analyzed:	07.17.2020 16:11	07.17.2020 16:17	07.17.2020 16:23	07.17.2020 16:29	07.17.2020 16:35	07.18.2020 17:07
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		267 5.00	352 5.00	648 5.00	1760 25.0	1750 25.0	1110 10.0
TDS by SM2540C	Extracted:						
	Analyzed:	07.15.2020 14:00	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		1090 5.00	1050 5.00	1550 5.00	3640 5.00	4350 5.00	2330 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 667340



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Wed 07.15.2020 16:34

Report Date: 08.01.2020 12:47

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667340-019	667340-020	667340-021	667340-022	667340-023	667340-024
	Field Id:	MW-16-W-201507	MW-21-W-201507	MW-17-W-201507	MW-23-W-201507	MW-22-W-201507	MW-22-WD-201507
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	07.15.2020 13:00	07.15.2020 13:15	07.15.2020 13:30	07.15.2020 13:45	07.15.2020 14:00	07.15.2020 14:00
Inorganic Anions by EPA 300/300.1	Extracted:	07.17.2020 13:00	07.17.2020 13:00	07.17.2020 13:00	07.17.2020 13:00	07.17.2020 13:00	07.17.2020 13:00
	Analyzed:	07.17.2020 17:24	07.17.2020 17:48	07.17.2020 17:55	07.17.2020 18:01	07.17.2020 18:07	07.17.2020 18:29
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		505 X 5.00	5850 25.0	7450 50.0	6060 50.0	10100 50.0	9130 50.0
TDS by SM2540C	Extracted:						
	Analyzed:	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35	07.16.2020 17:35
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		1390 5.00	10700 5.00	15000 5.00	12600 5.00	21900 5.00	21900 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 667340

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

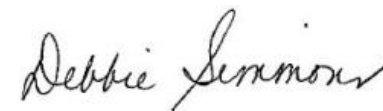
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Wed 07.15.2020 16:34
 Report Date: 08.01.2020 12:47
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	667340-025	667340-026				
	Field Id:	MW-30-W-201507	Livermore-W-201507				
	Depth:						
	Matrix:	WATER	WATER				
	Sampled:	07.15.2020 14:15	07.15.2020 14:30				
Inorganic Anions by EPA 300/300.1	Extracted:	07.17.2020 13:00	07.17.2020 13:00				
	Analyzed:	07.17.2020 18:35	07.17.2020 18:42				
	Units/RL:	mg/L RL	mg/L RL				
Chloride		2290 25.0	2440 25.0				
TDS by SM2540C	Extracted:						
	Analyzed:	07.16.2020 17:35	07.16.2020 17:35				
	Units/RL:	mg/L RL	mg/L RL				
Total Dissolved Solids		4530 5.00	5200 5.00				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 667340

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

08.01.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.01.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **667340**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 667340. 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 Eurofins Xenco, LLC. 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. 667340 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 667340

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-27-W-201507	W	07.15.2020 09:10		667340-001
MW-10-W-201507	W	07.15.2020 09:20		667340-002
MW-26-W-201507	W	07.15.2020 09:30		667340-003
MW-24-W-201507	W	07.15.2020 09:40		667340-004
MW-19-W-201507	W	07.15.2020 09:50		667340-005
MW-18-W-201507	W	07.15.2020 10:00		667340-006
MW-25-W-201507	W	07.15.2020 10:15		667340-007
MW-25-WD-201507	W	07.15.2020 10:15		667340-008
MW-12-W-201507	W	07.15.2020 10:30		667340-009
MW-31-W-201507	W	07.15.2020 10:45		667340-010
MW-11-W-201507	W	07.15.2020 11:00		667340-011
MW-6-W-201507	W	07.15.2020 11:15		667340-012
MW-5-W-201507	W	07.15.2020 11:30		667340-013
MW-4-W-201507	W	07.15.2020 11:45		667340-014
MW-3-W-201507	W	07.15.2020 12:00		667340-015
MW-14-W-201507	W	07.15.2020 12:15		667340-016
MW-13-W-201507	W	07.15.2020 12:30		667340-017
MW-15-W-201507	W	07.15.2020 12:45		667340-018
MW-16-W-201507	W	07.15.2020 13:00		667340-019
MW-21-W-201507	W	07.15.2020 13:15		667340-020
MW-17-W-201507	W	07.15.2020 13:30		667340-021
MW-23-W-201507	W	07.15.2020 13:45		667340-022
MW-22-W-201507	W	07.15.2020 14:00		667340-023
MW-22-WD-201507	W	07.15.2020 14:00		667340-024
MW-30-W-201507	W	07.15.2020 14:15		667340-025
Livermore-W-201507	W	07.15.2020 14:30		667340-026



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 667340

Report Date: 08.01.2020
Date Received: 07.15.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3132058 Inorganic Anions by EPA 300/300.1

Lab Sample ID 667340-019 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 667340-019, -020, -021, -022, -023, -024, -025, -026.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-27-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-001 Date Collected: 07.15.2020 09:10
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2950	25.0	1.05	mg/L	07.17.2020 14:00		50

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5120	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-10-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-002 Date Collected: 07.15.2020 09:20
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5130	25.0	1.05	mg/L	07.17.2020 14:06		50

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	9450	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-26-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-003 Date Collected: 07.15.2020 09:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1480	25.0	1.05	mg/L	07.17.2020 14:13		50

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3520	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-24-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-004 Date Collected: 07.15.2020 09:40
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4430	25.0	1.05	mg/L	07.17.2020 14:19		50

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	9130	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-19-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-005 Date Collected: 07.15.2020 09:50
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7880	50.0	2.10	mg/L	07.18.2020 16:59		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	13700	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-18-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-006 Date Collected: 07.15.2020 10:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21400	100	4.21	mg/L	07.17.2020 14:47		200

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131948

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	36000	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-25-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-007 Date Collected: 07.15.2020 10:15
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26100	100	4.21	mg/L	07.17.2020 14:53		200

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	37300	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-25-WD-201507**

Matrix: Water

Date Received: 07.15.2020 16:34

Lab Sample Id: 667340-008

Date Collected: 07.15.2020 10:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.17.2020 12:15

Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24000	100	4.21	mg/L	07.17.2020 15:00		200

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	36600	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-12-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-009 Date Collected: 07.15.2020 10:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12700	50.0	2.10	mg/L	07.17.2020 15:06		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	22700	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-31-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-010 Date Collected: 07.15.2020 10:45
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8890	50.0	2.10	mg/L	07.17.2020 15:36		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	17800	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-11-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-011 Date Collected: 07.15.2020 11:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6240	50.0	2.10	mg/L	07.17.2020 15:42		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	12000	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-6-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-012 Date Collected: 07.15.2020 11:15
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	417	5.00	0.210	mg/L	07.17.2020 16:05		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131948

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1590	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-5-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-013 Date Collected: 07.15.2020 11:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	267	5.00	0.210	mg/L	07.17.2020 16:11		10

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1090	5.00	5.00	mg/L	07.15.2020 14:00		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-4-W-201507**

Matrix: Water

Date Received: 07.15.2020 16:34

Lab Sample Id: 667340-014

Date Collected: 07.15.2020 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.17.2020 12:15

Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	352	5.00	0.210	mg/L	07.17.2020 16:17		10

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1050	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-3-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-015 Date Collected: 07.15.2020 12:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	648	5.00	0.210	mg/L	07.17.2020 16:23		10

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1550	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-14-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-016 Date Collected: 07.15.2020 12:15
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1760	25.0	1.05	mg/L	07.17.2020 16:29		50

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3640	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-13-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-017 Date Collected: 07.15.2020 12:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1750	25.0	1.05	mg/L	07.17.2020 16:35		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131949

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4350	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-15-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-018 Date Collected: 07.15.2020 12:45
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 12:15
Seq Number: 3132052

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1110	10.0	0.421	mg/L	07.18.2020 17:07		20

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2330	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-16-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-019 Date Collected: 07.15.2020 13:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 13:00
Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	505	5.00	0.210	mg/L	07.17.2020 17:24	X	10

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1390	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-21-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-020 Date Collected: 07.15.2020 13:15
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 13:00
Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5850	25.0	1.05	mg/L	07.17.2020 17:48		50

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	10700	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-17-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-021 Date Collected: 07.15.2020 13:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 13:00
Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7450	50.0	2.10	mg/L	07.17.2020 17:55		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	15000	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-23-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-022 Date Collected: 07.15.2020 13:45
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 13:00
Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6060	50.0	2.10	mg/L	07.17.2020 18:01		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	12600	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-22-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-023 Date Collected: 07.15.2020 14:00
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 13:00
Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10100	50.0	2.10	mg/L	07.17.2020 18:07		100

Analytical Method: TDS by SM2540C
Tech: SPC % Moisture:
Analyst: SPC
Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	21900	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-22-WD-201507**

Matrix: Water

Date Received: 07.15.2020 16:34

Lab Sample Id: 667340-024

Date Collected: 07.15.2020 14:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.17.2020 13:00

Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9130	50.0	2.10	mg/L	07.17.2020 18:29		100

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	21900	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-30-W-201507** Matrix: Water Date Received: 07.15.2020 16:34
Lab Sample Id: 667340-025 Date Collected: 07.15.2020 14:15
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.17.2020 13:00
Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2290	25.0	1.05	mg/L	07.17.2020 18:35		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3131949

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4530	5.00	5.00	mg/L	07.16.2020 17:35		1

**Certificate of Analytical Results 667340****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **Livermore-W-201507**

Matrix: Water

Date Received: 07.15.2020 16:34

Lab Sample Id: 667340-026

Date Collected: 07.15.2020 14:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.17.2020 13:00

Seq Number: 3132058

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2440	25.0	1.05	mg/L	07.17.2020 18:42		50

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131949

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	5200	5.00	5.00	mg/L	07.16.2020 17:35		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132052

Matrix: Water

Prep Method: E300P

Date Prep: 07.17.2020

MB Sample Id: 7707561-1-BLK

LCS Sample Id: 7707561-1-BKS

LCSD Sample Id: 7707561-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	25.9	104	25.9	104	90-110	0	20	mg/L	07.17.2020 13:20	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132058

Matrix: Water

Prep Method: E300P

Date Prep: 07.17.2020

MB Sample Id: 7707562-1-BLK

LCS Sample Id: 7707562-1-BKS

LCSD Sample Id: 7707562-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	26.4	106	26.3	105	90-110	0	20	mg/L	07.17.2020 17:08	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132052

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.17.2020

Parent Sample Id: 667440-001

MS Sample Id: 667440-001 S

MSD Sample Id: 667440-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	63.2	25.0	89.8	106	88.3	100	90-110	2	20	mg/L	07.17.2020 13:44	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132052

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 07.17.2020

Parent Sample Id: 667441-001

MS Sample Id: 667441-001 S

MSD Sample Id: 667441-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	34.0	25.0	61.1	108	60.1	104	90-110	2	20	mg/L	07.17.2020 15:20	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132058

Matrix: Water

Prep Method: E300P

Date Prep: 07.17.2020

Parent Sample Id: 667340-019

MS Sample Id: 667340-019 S

MSD Sample Id: 667340-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	505	250	785	112	782	111	90-110	0	20	mg/L	07.17.2020 17:32	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132058

Matrix: Water

Prep Method: E300P

Date Prep: 07.17.2020

Parent Sample Id: 667544-001

MS Sample Id: 667544-001 S

MSD Sample Id: 667544-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	251	25.0	262	44	266	60	90-110	2	20	mg/L	07.18.2020 16:35	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Water

MB Sample Id: 3131948-1-BLK

LCS Sample Id: 3131948-1-BKS

LCSD Sample Id: 3131948-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	996	100	975	98	80-120	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131949

Matrix: Water

MB Sample Id: 3131949-1-BLK

LCS Sample Id: 3131949-1-BKS

LCSD Sample Id: 3131949-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	991	99	993	99	80-120	0	10	mg/L	07.16.2020 17:35	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Ground Water

Parent Sample Id: 667139-015

MD Sample Id: 667139-015 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	11400	11200	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131948

Matrix: Water

Parent Sample Id: 667340-004

MD Sample Id: 667340-004 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	9130	9300	2	10	mg/L	07.15.2020 14:00	

Analytical Method: TDS by SM2540C

Seq Number: 3131949

Matrix: Water

Parent Sample Id: 667340-014

MD Sample Id: 667340-014 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1050	1030	2	10	mg/L	07.16.2020 17:35	

Analytical Method: TDS by SM2540C

Seq Number: 3131949

Matrix: Water

Parent Sample Id: 667340-024

MD Sample Id: 667340-024 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	21900	21900	0	10	mg/L	07.16.2020 17:35	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 667340

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

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Page 1 of 3

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apivovices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc.- 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX 79703	City, State ZIP:	Niagara Falls, NY 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher Knight@gnd.com & Brittany White@gnd.com & eds@gnd.com

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

Project Name:	Dollarhide	Turn Around	ANALYSIS REQUEST										Work Order Notes
Project Number:	55270	Routine ☒ Rush:											
P.O. Number:		Due Date:											
Sample's Name:	Matthew Langhals												

SAMPLE RECEIPT	Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒	Thermometer ID	Correction Factor:	Total Containers:
	Temperature (°C):	0541					
	Received Inact:	Yes ☒ No ☐					
	Cooler Custody Seals:	Yes ☐ No ☒					
	Sample Custody Seals:	Yes ☐ No ☒					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST										Sample Comments		
						Chlorides	TDS											
MW-27-W-201507	GW	07/15	0910	-	1	X	X											
MW-10-W-201507	GW	07/15	0920	-	1	X	X											
MW-26-W-201507	GW	07/15	0930	-	1	X	X											
MW-24-W-201507	GW	07/15	0940	-	1	X	X											
MW-19-W-201507	GW	07/15	0950	-	1	X	X											
MW-18-W-201507	GW	07/15	1000	-	1	X	X											
MW-25-W-201507	GW	07/15	1015	-	1	X	X											
MW-35-W-201507	GW	07/15	1015	-	1	X	X											
MW-13-W-201507	GW	07/15	1030	-	1	X	X											
MW-31-W-201507	GW	07/15	1045	-	1	X	X											

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/15/20			



Chain of Custody

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

Work Order No: 667340

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Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc.- 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX 79703	City, State ZIP:	Niagara Falls, NY 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher Knight@gnd.com & Brittany White@gnd.com & edds@gnd.com

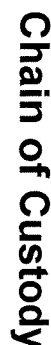
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐	Level III ☐ PST/UST ☐ TRRP ☒ Level IV ☐
Deliverables: EDD ☐	Adapt ☐ Other: ☐

Project Name:	Dollarhide	Turn Around	ANALYSIS REQUEST																Work Order Notes			
Project Number:	55270	Routine ☒																				
P.O. Number:		Rush:																				
Sampler's Name:	Matthew Laughlin	Due Date:																				
SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	(Yes) ☐ No ☐																	
Temperature (°C):	CS101	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	Chlorides	TDS											TAT starts the day received by the lab, if received by 4:30pm	Sample Comments			
MW-11-W-201507	GW	07/15	1100	-	1	X	X															
MW-6-W-201507	GW	07/15	1115	-	1	X	X															
MW-5-W-201507	GW	07/15	1130	-	1	X	X															
MW-4-W-201507	GW	07/15	1145	-	1	X	X															
MW-3-W-201507	GW	07/15	1200	-	1	X	X															
MW-14-W-201507	GW	07/15	1215	-	1	X	X															
MW-13-W-201507	GW	07/15	1230	-	1	X	X															
MW-15-W-201507	GW	07/15	1245	-	1	X	X															
MW-16-W-201507	GW	07/15	1300	-	1	X	X															
MW-21-W-201507	GW	07/15	1315	-	1	X	X															

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/15/15			
		14281			



Work Order No: 6667370

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[illegible]

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		7/15/00	2		
3 		1/01	4		
5			6		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.15.2020 04.34.30 PM

Work Order #: 667340

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.1
#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)?	N/A
#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:

PH Device/Lot#:

Checklist completed by: Jessica Kramer
Jessica Kramer

Date: 07.15.2020

Checklist reviewed by: Debbie Simmons
Debbie Simmons

Date: 07.16.2020

Certificate of Analysis Summary 667969

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

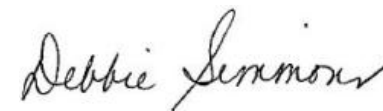
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 07.10.2020 16:05
 Report Date: 08.01.2020 12:53
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id: 667969-001 Field Id: Wilson Ranch Well-W-20 Depth: Matrix: GROUND WATER Sampled: 07.10.2020 13:45	Lab Id: 667969-002 Field Id: Smith Residence Depth: Matrix: GROUND WATER Sampled: 07.10.2020 14:15				
Inorganic Anions by EPA 300/300.1	Extracted: 07.13.2020 16:50 Analyzed: 07.13.2020 23:47 Units/RL: mg/L RL	Extracted: 07.13.2020 16:50 Analyzed: 07.13.2020 23:53 Units/RL: mg/L RL				
Chloride	1030 10.0	1310 10.0				
TDS by SM2540C	Extracted: Analyzed: 07.14.2020 16:04 Units/RL: mg/L RL	Extracted: Analyzed: 07.14.2020 16:04 Units/RL: mg/L RL				
Total Dissolved Solids	1990 5.00	2570 5.00				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 667969

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

08.01.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.01.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **667969**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 667969. 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 Eurofins Xenco, LLC. 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. 667969 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 667969

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Wilson Ranch Well-W-201007	W	07.10.2020 13:45		667969-001
Smith Residence	W	07.10.2020 14:15		667969-002



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 667969

Report Date: 08.01.2020
Date Received: 07.10.2020

Sample receipt non conformances and comments:

per Liz Whiddon, please remove the following two samples from 666617 and place them on a different work order (separate report) from all of the other samples.

- Wilson Ranch Well-W-201007
 - Smith Residence
-

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 667969

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **Wilson Ranch Well-W-201007** Matrix: Ground Water Date Received: 07.10.2020 16:05
 Lab Sample Id: 667969-001 Date Collected: 07.10.2020 13:45
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 07.13.2020 16:50
 Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1030	10.0	0.421	mg/L	07.13.2020 23:47		20

Analytical Method: TDS by SM2540C
 Tech: SPC
 Analyst: SPC
 Seq Number: 3131946

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1990	5.00	5.00	mg/L	07.14.2020 16:04		1

**Certificate of Analytical Results 667969****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **Smith Residence**

Matrix: Ground Water

Date Received: 07.10.2020 16:05

Lab Sample Id: 667969-002

Date Collected: 07.10.2020 14:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 07.13.2020 16:50

Seq Number: 3131511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1310	10.0	0.421	mg/L	07.13.2020 23:53		20

Analytical Method: TDS by SM2540C

Tech: SPC

% Moisture:

Analyst: SPC

Seq Number: 3131946

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2570	5.00	5.00	mg/L	07.14.2020 16:04		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131511

Matrix: Water

Prep Method: E300P

Date Prep: 07.13.2020

MB Sample Id: 7707251-1-BLK

LCS Sample Id: 7707251-1-BKS

LCSD Sample Id: 7707251-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	26.1	104	26.1	104	90-110	0	20	mg/L	07.13.2020 21:21	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.13.2020

Parent Sample Id: 666917-004

MS Sample Id: 666917-004 S

MSD Sample Id: 666917-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	57.3	125	189	105	189	105	90-110	0	20	mg/L	07.13.2020 21:40	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3131511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 07.13.2020

Parent Sample Id: 666917-006

MS Sample Id: 666917-006 S

MSD Sample Id: 666917-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	28.8	125	161	106	162	107	90-110	1	20	mg/L	07.13.2020 23:09	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Water

MB Sample Id: 3131946-1-BLK

LCS Sample Id: 3131946-1-BKS

LCSD Sample Id: 3131946-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	998	100	998	100	80-120	0	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Ground Water

Parent Sample Id: 666917-001

MD Sample Id: 666917-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1130	1120	1	10	mg/L	07.14.2020 16:04	

Analytical Method: TDS by SM2540C

Seq Number: 3131946

Matrix: Ground Water

Parent Sample Id: 667041-001

MD Sample Id: 667041-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8020	8120	1	10	mg/L	07.14.2020 16:04	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 1607969

1607969

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

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Page 1 of 1

Project Manager: Nick Casten

Company Name: GHD

Address: 2135 S. Loop 250 West

City, State ZIP: Midland, TX, 79703

Phone: 225-292-9007

Email:

Nick Casten@ghd.com & Christopher.Knight@ghd.com &
Brittany.White@ghd.com & edds@ghd.com

Bill to: (if different) Gina Blair- Apinvoices-340@ghd.com

Company Name: GHD Services Inc. - 340

Address: 2055 Niagara Falls Blvd.

City, State ZIP: Niagara Falls, NY, 14304

Turn Around

Routine ☐

Rush:

Due Date:

ANALYSIS REQUEST

Work Order Notes

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: Dollahide

P.O. Number: 55270

Sampler's Name: Ryan L. Single

Temp Blank: Yes ☒ No ☐

Temperature (°C): 23.1.9

Received Inlet: Yes ☒ No ☐Cooler Custody Seals: Yes ☒ No ☐Sample Custody Seals: Yes ☒ No ☐

Thermometer ID: 42-2

Correction Factor: -0.4

Total Containers:

Sample Identification

Matrix

Date

Sampled

Time

Sampled

Depth

Number of Containers

Chlorides

TDS

ANALYSIS REQUEST

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:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCPLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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 to Xenco. 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

Date/Time

Date/Time

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 07.10.2020 04.05.00 PM

Work Order #: 667969

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

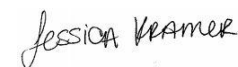
Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.9
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain 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)?	N/A
#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:

PH Device/Lot#:

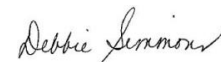
Checklist completed by:



Jessica Kramer

Date: 07.23.2020

Checklist reviewed by:



Debbie Simmons

Date: 08.01.2020

Certificate of Analysis Summary 674762



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 14:56
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674762-001	674762-002	674762-003	674762-004	674762-005	674762-006
	Field Id:	NM-MW-6-W-200710	NM-MW-5-W-200710	NM-MW-2-W-200710	NM-MW-1-W-200710	NM-MW-3-W-200710	NM-MW-7-W-200710
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.07.2020 12:00	10.07.2020 12:30	10.07.2020 13:30	10.07.2020 13:00	10.07.2020 14:00	10.07.2020 14:30
Inorganic Anions by EPA 300/300.1	Extracted:	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50
	Analyzed:	10.09.2020 20:19	10.09.2020 20:27	10.09.2020 20:34	10.09.2020 20:42	10.09.2020 21:04	10.09.2020 21:11
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		147 2.50	155 5.00	706 5.00	288 5.00	253 2.50	2270 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		826 5.00	1330 5.00	1370 5.00	1450 5.00	731 5.00	4860 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674762



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 14:56
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674762-007	674762-008	674762-009	674762-010	674762-011	674762-012
	Field Id:	RRR Ranch Windmill-W-	NM-MW-4-W-200710	NM-MW-8-W-200710	NM-MW-9-W-200810	NM-MW-14-W-200810	Wilson Ranch Well-W-20
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.07.2020 15:00	10.07.2020 15:30	10.07.2020 16:00	10.08.2020 10:15	10.08.2020 10:45	10.08.2020 13:15
TDS by SM2540C	Extracted:						
	Analyzed:	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		4110 5.00	431 5.00	11100 5.00	811 5.00	465 5.00	1710 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674762



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 14:56
 Project Manager: Debbie Simmons

<i>Analysis Requested</i>	<i>Lab Id:</i>	674762-007	674762-008	674762-009	674762-010	674762-011	674762-012
	<i>Field Id:</i>	RRR Ranch Windmill-W-	NM-MW-4-W-200710	NM-MW-8-W-200710	NM-MW-9-W-200810	NM-MW-14-W-200810	Wilson Ranch Well-W-20
	<i>Depth:</i>						
	<i>Matrix:</i>	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
Inorganic Anions by EPA 300/300.1	<i>Sampled:</i>	10.07.2020 15:00	10.07.2020 15:30	10.07.2020 16:00	10.08.2020 10:15	10.08.2020 10:45	10.08.2020 13:15
	<i>Extracted:</i>	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50	10.09.2020 17:50
	<i>Analyzed:</i>	10.09.2020 21:19	10.09.2020 21:26	10.09.2020 21:34	10.09.2020 22:04	10.09.2020 22:11	10.09.2020 22:34
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		1960 25.0	47.7 2.50	6370 25.0	256 5.00	26.4 2.50	784 10.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674762

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

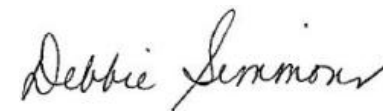
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 14:56
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674762-013	674762-014	674762-015	674762-016		
	Field Id:	Smith Residence-W-2008	NM-MW-10-W-200810	MW-29-W-200810	MW-28-W-200810		
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER		
	Sampled:	10.08.2020 14:15	10.08.2020 14:45	10.08.2020 18:15	10.08.2020 17:45		
TDS by SM2540C	Extracted:						
	Analyzed:	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Total Dissolved Solids		1570 5.00	1720 5.00	1460 5.00	8160 5.00		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Certificate of Analysis Summary 674762

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

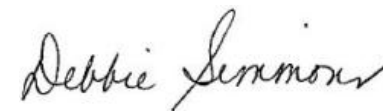
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 14:56
 Project Manager: Debbie Simmons

<i>Analysis Requested</i>	<i>Lab Id:</i>	674762-013	674762-014	674762-015	674762-016		
	<i>Field Id:</i>	Smith Residence-W-2008	NM-MW-10-W-200810	MW-29-W-200810	MW-28-W-200810		
	<i>Depth:</i>						
	<i>Matrix:</i>	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER		
	<i>Sampled:</i>	10.08.2020 14:15	10.08.2020 14:45	10.08.2020 18:15	10.08.2020 17:45		
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	10.09.2020 17:50	10.09.2020 17:50	10.12.2020 14:00	10.12.2020 14:00		
	<i>Analyzed:</i>	10.09.2020 22:41	10.09.2020 22:49	10.12.2020 17:29	10.12.2020 17:36		
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Chloride		753 5.00	366 5.00	637 5.00	3780 25.0		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 674762

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

10.29.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.29.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **674762**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 674762. 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 Eurofins Xenco, LLC. 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. 674762 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 674762****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-6-W-200710	W	10.07.2020 12:00		674762-001
NM-MW-5-W-200710	W	10.07.2020 12:30		674762-002
NM-MW-2-W-200710	W	10.07.2020 13:30		674762-003
NM-MW-1-W-200710	W	10.07.2020 13:00		674762-004
NM-MW-3-W-200710	W	10.07.2020 14:00		674762-005
NM-MW-7-W-200710	W	10.07.2020 14:30		674762-006
RRR Ranch Windmill-W-200710	W	10.07.2020 15:00		674762-007
NM-MW-4-W-200710	W	10.07.2020 15:30		674762-008
NM-MW-8-W-200710	W	10.07.2020 16:00		674762-009
NM-MW-9-W-200810	W	10.08.2020 10:15		674762-010
NM-MW-14-W-200810	W	10.08.2020 10:45		674762-011
Wilson Ranch Well-W-200810	W	10.08.2020 13:15		674762-012
Smith Residence-W-200810	W	10.08.2020 14:15		674762-013
NM-MW-10-W-200810	W	10.08.2020 14:45		674762-014
MW-29-W-200810	W	10.08.2020 18:15		674762-015
MW-28-W-200810	W	10.08.2020 17:45		674762-016



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 674762

Report Date: 10.29.2020
Date Received: 10.09.2020

Sample receipt non conformances and comments:

10.29-20: report revised to correct IDs per Matt Laughin's instruction the the lab as year-date-month. Also samples MW-28 and MW-29 received not on COC were added to this work order as 674762-015 and 674762-016.

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-6-W-200710

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-001

Date Collected: 10.07.2020 12:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	147	2.50	0.105	mg/L	10.09.2020 20:19		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	826	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-5-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-002

Date Collected: 10.07.2020 12:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	155	5.00	0.210	mg/L	10.09.2020 20:27		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1330	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-2-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-003

Date Collected: 10.07.2020 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	706	5.00	0.210	mg/L	10.09.2020 20:34		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1370	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-1-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-004

Date Collected: 10.07.2020 13:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	288	5.00	0.210	mg/L	10.09.2020 20:42		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1450	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-3-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-005

Date Collected: 10.07.2020 14:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	253	2.50	0.105	mg/L	10.09.2020 21:04		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	731	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-7-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-006

Date Collected: 10.07.2020 14:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2270	25.0	1.05	mg/L	10.09.2020 21:11		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4860	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **RRR Ranch Windmill-W-200710** Matrix: Ground Water Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-007 Date Collected: 10.07.2020 15:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1960	25.0	1.05	mg/L	10.09.2020 21:19		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4110	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-4-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-008

Date Collected: 10.07.2020 15:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.7	2.50	0.105	mg/L	10.09.2020 21:26		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	431	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-8-W-200710**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-009

Date Collected: 10.07.2020 16:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6370	25.0	1.05	mg/L	10.09.2020 21:34		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	11100	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-9-W-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-010

Date Collected: 10.08.2020 10:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	256	5.00	0.210	mg/L	10.09.2020 22:04		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	811	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-14-W-200810

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-011

Date Collected: 10.08.2020 10:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.4	2.50	0.105	mg/L	10.09.2020 22:11		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	465	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX
Dollarhide

Sample Id: **Wilson Ranch Well-W-200810** Matrix: Ground Water Date Received: 10.09.2020 10:19
Lab Sample Id: 674762-012 Date Collected: 10.08.2020 13:15

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	784	10.0	0.421	mg/L	10.09.2020 22:34		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1710	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **Smith Residence-W-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-013

Date Collected: 10.08.2020 14:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	753	5.00	0.210	mg/L	10.09.2020 22:41		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1570	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-10-W-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-014

Date Collected: 10.08.2020 14:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	366	5.00	0.210	mg/L	10.09.2020 22:49		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1720	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-29-W-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-015

Date Collected: 10.08.2020 18:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	637	5.00	0.210	mg/L	10.12.2020 17:29		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1460	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674762

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-28-W-200810** Matrix: Ground Water Date Received: 10.09.2020 10:19

Lab Sample Id: 674762-016 Date Collected: 10.08.2020 17:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3780	25.0	1.05	mg/L	10.12.2020 17:36		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8160	5.00	5.00	mg/L	10.09.2020 17:30		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139421

Matrix: Water

Prep Method: E300P

Date Prep: 10.09.2020

MB Sample Id: 7713004-1-BLK

LCS Sample Id: 7713004-1-BKS

LCSD Sample Id: 7713004-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	27.0	108	26.9	108	90-110	0	20	mg/L	10.09.2020 19:42	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Water

Prep Method: E300P

Date Prep: 10.12.2020

MB Sample Id: 7713088-1-BLK

LCS Sample Id: 7713088-1-BKS

LCSD Sample Id: 7713088-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	27.3	109	27.2	109	90-110	0	20	mg/L	10.12.2020 16:37	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139421

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 10.09.2020

Parent Sample Id: 674697-001

MS Sample Id: 674697-001 S

MSD Sample Id: 674697-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	18.6	25.0	44.5	104	44.9	105	90-110	1	20	mg/L	10.09.2020 20:04	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139421

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 10.09.2020

Parent Sample Id: 674698-001

MS Sample Id: 674698-001 S

MSD Sample Id: 674698-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	19.2	25.0	45.6	106	45.5	105	90-110	0	20	mg/L	10.09.2020 21:49	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.12.2020

Parent Sample Id: 674766-002

MS Sample Id: 674766-002 S

MSD Sample Id: 674766-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	201	250	478	111	475	110	90-110	1	20	mg/L	10.12.2020 16:59	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.12.2020

Parent Sample Id: 674767-006

MS Sample Id: 674767-006 S

MSD Sample Id: 674767-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.0	125	162	111	164	113	90-110	1	20	mg/L	10.12.2020 18:44	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3139425

Matrix: Water

MB Sample Id: 3139425-1-BLK

LCS Sample Id: 3139425-1-BKS

LCSD Sample Id: 3139425-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	991	99	994	99	80-120	0	10	mg/L	10.09.2020 17:30	

Analytical Method: TDS by SM2540C

Seq Number: 3139425

Matrix: Ground Water

Parent Sample Id: 674762-001

MD Sample Id: 674762-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	826	825	0	10	mg/L	10.09.2020 17:30	

Analytical Method: TDS by SM2540C

Seq Number: 3139425

Matrix: Ground Water

Parent Sample Id: 674762-011

MD Sample Id: 674762-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	465	473	2	10	mg/L	10.09.2020 17:30	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 10747162

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:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick.Casten@gnd.com & Christopher.Knight@gnd.com & Brittany.White@gnd.com & edds@gnd.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: ☐

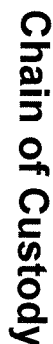
Project Name:	Dollarhide	Turn Around	☒
Project Number:	55270	Routine	☒
P.O. Number:	34032659	Rush:	
Sampler's Name:	Matthew Laughlin	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):	10/15	Temp Blank:	Yes ☐ No ☒
Received Intact:	Yes ☒ No ☐	Wet Ice:	Yes ☐ No ☒
Cooler Custody Seals:	Yes ☐ No ☒ N/A	Correction Factor:	
Sample Custody Seals:	Yes ☐ No ☒ N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS	ANALYSIS REQUEST										Work Order Notes
NM-MW-6-W-200710	GW	10/7/20	1300	-	1	X	X											
NM-MW-5-W-200710	GW	10/7/20	1230	-	1	X	X											
NM-MW-2-W-200710	GW	10/7/20	1330	-	1	X	X											
NM-MW-1-W-200710	GW	10/7/20	1300	-	1	X	X											
NM-MW-3-W-200710	GW	10/7/20	1400	-	1	X	X											
NM-MW-7-W-200710	GW	10/7/20	1430	-	1	X	X											
RRR Rock Well 11-W-200720	GW	10/7/20	1500	-	1	X	X											
NM-MW-4-W-200720	GW	10/7/20	1530	-	1	X	X											
NM-MW-8-W-200720	GW	10/7/20	1600	-	1	X	X											
NM-MW-9-W-200830	GW	10/8/20	1015	-	1	X	X											

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	10/9	2		
3 <i>[Signature]</i>	<i>[Signature]</i>	10/9	4		
5			6		



1074762

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-1111
Hobbs, NM (575-392-7550)

Page 0 of 3

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:

[illegible][illegible][illegible]

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	8RCRA TCLP / SPLP 6010:	13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn 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 		10/19	2		
3		10/19	4		
5			6		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10.09.2020 10.19.00 AM

Work Order #: 674762

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.5
#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?	Yes
	MW-28 and MW-29 received in cooler, not on COC. Per Liz analyze these for TDS and Chlorides.
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

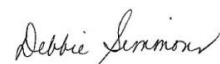
Checklist completed by:



Brianna Teel

Date: 10.09.2020

Checklist reviewed by:



Debbie Simmons

Date: 10.12.2020

Certificate of Analysis Summary 674766



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.22.2020 17:33
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674766-001	674766-002	674766-003	674766-004		
	Field Id:	MW-32-200810	MW-33-200810	MW-34-200810	MW-32-WD-200810		
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER		
	Sampled:	10.08.2020 15:15	10.08.2020 15:45	10.08.2020 16:15	10.08.2020 00:00		
Inorganic Anions by EPA 300/300.1	Extracted:	10.09.2020 17:50	10.12.2020 14:00	10.12.2020 14:00	10.12.2020 14:00		
	Analyzed:	10.09.2020 22:56	10.12.2020 16:52	10.12.2020 17:14	10.12.2020 17:22		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Chloride		349 5.00	201 X 5.00	73.3 2.50	327 5.00		
TDS by SM2540C	Extracted:						
	Analyzed:	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Total Dissolved Solids		1110 5.00	1090 5.00	608 5.00	1120 5.00		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Analytical Report 674766

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

10.22.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.22.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **674766**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 674766. 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 Eurofins Xenco, LLC. 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. 674766 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 674766

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-32-200810	W	10.08.2020 15:15		674766-001
MW-33-200810	W	10.08.2020 15:45		674766-002
MW-34-200810	W	10.08.2020 16:15		674766-003
MW-32-WD-200810	W	10.08.2020 00:00		674766-004



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 674766

Report Date: 10.22.2020
Date Received: 10.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3139511 Inorganic Anions by EPA 300/300.1

Lab Sample ID 674766-002 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: 674766-002, -003, -004.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 674766

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-32-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674766-001

Date Collected: 10.08.2020 15:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.09.2020 17:50

% Moisture:

Seq Number: 3139421

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	349	5.00	0.210	mg/L	10.09.2020 22:56		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1110	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674766

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-33-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674766-002

Date Collected: 10.08.2020 15:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	201	5.00	0.210	mg/L	10.12.2020 16:52	X	10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1090	5.00	5.00	mg/L	10.09.2020 17:30		1

**Certificate of Analytical Results 674766****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id: **MW-34-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674766-003

Date Collected: 10.08.2020 16:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	73.3	2.50	0.105	mg/L	10.12.2020 17:14		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	608	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674766

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-32-WD-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674766-004

Date Collected: 10.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	327	5.00	0.210	mg/L	10.12.2020 17:22		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139425

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1120	5.00	5.00	mg/L	10.09.2020 17:30		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139421

Matrix: Water

Prep Method: E300P

Date Prep: 10.09.2020

MB Sample Id: 7713004-1-BLK

LCS Sample Id: 7713004-1-BKS

LCSD Sample Id: 7713004-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	27.0	108	26.9	108	90-110	0	20	mg/L	10.09.2020 19:42	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Water

Prep Method: E300P

Date Prep: 10.12.2020

MB Sample Id: 7713088-1-BLK

LCS Sample Id: 7713088-1-BKS

LCSD Sample Id: 7713088-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	27.3	109	27.2	109	90-110	0	20	mg/L	10.12.2020 16:37	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139421

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 10.09.2020

Parent Sample Id: 674697-001

MS Sample Id: 674697-001 S

MSD Sample Id: 674697-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	18.6	25.0	44.5	104	44.9	105	90-110	1	20	mg/L	10.09.2020 20:04	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139421

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 10.09.2020

Parent Sample Id: 674698-001

MS Sample Id: 674698-001 S

MSD Sample Id: 674698-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	19.2	25.0	45.6	106	45.5	105	90-110	0	20	mg/L	10.09.2020 21:49	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.12.2020

Parent Sample Id: 674766-002

MS Sample Id: 674766-002 S

MSD Sample Id: 674766-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	201	250	478	111	475	110	90-110	1	20	mg/L	10.12.2020 16:59	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.12.2020

Parent Sample Id: 674767-006

MS Sample Id: 674767-006 S

MSD Sample Id: 674767-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.0	125	162	111	164	113	90-110	1	20	mg/L	10.12.2020 18:44	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3139425

Matrix: Water

MB Sample Id: 3139425-1-BLK

LCS Sample Id: 3139425-1-BKS

LCSD Sample Id: 3139425-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	991	99	994	99	80-120	0	10	mg/L	10.09.2020 17:30	

Analytical Method: TDS by SM2540C

Seq Number: 3139425

Matrix: Ground Water

Parent Sample Id: 674762-001

MD Sample Id: 674762-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	826	825	0	10	mg/L	10.09.2020 17:30	

Analytical Method: TDS by SM2540C

Seq Number: 3139425

Matrix: Ground Water

Parent Sample Id: 674762-011

MD Sample Id: 674762-011 D

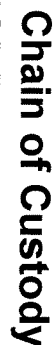
Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	465	473	2	10	mg/L	10.09.2020 17:30	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



674766

www.xenco.com Page 1 of 1

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

[illegible][illegible]

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		10/9	2		
3 		10/9	4		
5 		10/9	6		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10.09.2020 10.19.00 AM

Work Order #: 674766

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.5
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

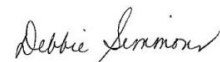
Checklist completed by:



Brianna Teel

Date: 10.09.2020

Checklist reviewed by:



Debbie Simmons

Date: 10.12.2020

Certificate of Analysis Summary 674767



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 09:50
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674767-001	674767-002	674767-003	674767-004	674767-005	674767-006
	Field Id:	NM-MW-11-200810	NM-MW-12-200810	NM-MW-13-200810	NM-MW-15-200810	NM-MW-17-200810	NM-MW-20-200810
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.08.2020 11:45	10.08.2020 13:45	10.08.2020 12:15	10.08.2020 11:15	10.08.2020 12:45	10.08.2020 16:45
Inorganic Anions by EPA 300/300.1	Extracted:	10.12.2020 14:00	10.12.2020 14:00	10.12.2020 14:00	10.12.2020 14:00	10.12.2020 14:00	10.12.2020 14:00
	Analyzed:	10.12.2020 17:59	10.12.2020 18:06	10.12.2020 18:14	10.12.2020 18:21	10.12.2020 18:29	10.12.2020 18:36
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		181 5.00	580 5.00	211 5.00	59.9 2.50	216 5.00	23.0 X 2.50
TDS by SM2540C	Extracted:						
	Analyzed:	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		1960 5.00	1280 5.00	1100 5.00	521 5.00	976 5.00	402 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674767

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

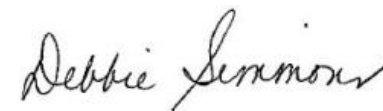
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 10.09.2020 10:19
 Report Date: 10.29.2020 09:50
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674767-007	674767-008				
	Field Id:	NM-MW-21-200810	NM-MW-21-WD-20081				
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER				
	Sampled:	10.08.2020 17:15	10.08.2020 00:00				
Inorganic Anions by EPA 300/300.1	Extracted:	10.12.2020 14:00	10.12.2020 14:00				
	Analyzed:	10.12.2020 18:59	10.12.2020 19:06				
	Units/RL:	mg/L RL	mg/L RL				
Chloride		29.8 2.50	29.6 2.50				
TDS by SM2540C	Extracted:						
	Analyzed:	10.09.2020 17:30	10.09.2020 17:30				
	Units/RL:	mg/L RL	mg/L RL				
Total Dissolved Solids		523 5.00	534 5.00				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 674767

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

10.29.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.29.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **674767**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 674767. 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 Eurofins Xenco, LLC. 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. 674767 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 674767****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-11-200810	W	10.08.2020 11:45		674767-001
NM-MW-12-200810	W	10.08.2020 13:45		674767-002
NM-MW-13-200810	W	10.08.2020 12:15		674767-003
NM-MW-15-200810	W	10.08.2020 11:15		674767-004
NM-MW-17-200810	W	10.08.2020 12:45		674767-005
NM-MW-20-200810	W	10.08.2020 16:45		674767-006
NM-MW-21-200810	W	10.08.2020 17:15		674767-007
NM-MW-21-WD-200810	W	10.08.2020 00:00		674767-008

**CASE NARRATIVE****Client Name: GHD Services, INC- Midland****Project Name: Dollarhide**

Project ID: 055270
Work Order Number(s): 674767

Report Date: 10.29.2020
Date Received: 10.09.2020

Sample receipt non conformances and comments:

10.29.20: report revised extra samples received removed and placed on another COC, did not belong with these samples numbered 674767.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3139511 Inorganic Anions by EPA 300/300.1

Lab Sample ID 674767-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674767-001, -002, -003, -004, -005, -006, -007, -008.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-11-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-001

Date Collected: 10.08.2020 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	181	5.00	0.210	mg/L	10.12.2020 17:59		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1960	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-12-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-002

Date Collected: 10.08.2020 13:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	580	5.00	0.210	mg/L	10.12.2020 18:06		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1280	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-13-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-003

Date Collected: 10.08.2020 12:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	211	5.00	0.210	mg/L	10.12.2020 18:14		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1100	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-15-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-004

Date Collected: 10.08.2020 11:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.9	2.50	0.105	mg/L	10.12.2020 18:21		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	521	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-17-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-005

Date Collected: 10.08.2020 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	216	5.00	0.210	mg/L	10.12.2020 18:29		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	976	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-20-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-006

Date Collected: 10.08.2020 16:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.0	2.50	0.105	mg/L	10.12.2020 18:36	X	5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	402	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-21-200810**

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-007

Date Collected: 10.08.2020 17:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.8	2.50	0.105	mg/L	10.12.2020 18:59		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	523	5.00	5.00	mg/L	10.09.2020 17:30		1



Certificate of Analytical Results 674767

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-21-WD-200810

Matrix: Ground Water

Date Received: 10.09.2020 10:19

Lab Sample Id: 674767-008

Date Collected: 10.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 10.12.2020 14:00

% Moisture:

Seq Number: 3139511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.6	2.50	0.105	mg/L	10.12.2020 19:06		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3139430

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	534	5.00	5.00	mg/L	10.09.2020 17:30		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Water

Prep Method: E300P

Date Prep: 10.12.2020

MB Sample Id: 7713088-1-BLK

LCS Sample Id: 7713088-1-BKS

LCSD Sample Id: 7713088-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	27.3	109	27.2	109	90-110	0	20	mg/L	10.12.2020 16:37	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.12.2020

Parent Sample Id: 674766-002

MS Sample Id: 674766-002 S

MSD Sample Id: 674766-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	201	250	478	111	475	110	90-110	1	20	mg/L	10.12.2020 16:59	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139511

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.12.2020

Parent Sample Id: 674767-006

MS Sample Id: 674767-006 S

MSD Sample Id: 674767-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.0	125	162	111	164	113	90-110	1	20	mg/L	10.12.2020 18:44	X

Analytical Method: TDS by SM2540C

Seq Number: 3139430

Matrix: Water

MB Sample Id: 3139430-1-BLK

LCS Sample Id: 3139430-1-BKS

LCSD Sample Id: 3139430-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	994	99	985	99	80-120	1	10	mg/L	10.09.2020 17:30	

Analytical Method: TDS by SM2540C

Seq Number: 3139430

Matrix: Ground Water

Parent Sample Id: 674767-001

MD Sample Id: 674767-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1960	1980	1	10	mg/L	10.09.2020 17:30	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

674767

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 1

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc.- 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.Knight@gnd.com & Britany.White@gnd.com & edds@gnd.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: _____	
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Project Name:	Dollarhide	Turn Around	☒	ANALYSIS REQUEST	Work Order Notes																																																																								
Project Number:	55270	Routine	☒																																																																										
P.O. Number:	34032659	Rush:																																																																											
Sampler's Name:	Matthew Laughlin	Due Date:																																																																											
SAMPLE RECEIPT																																																																													
Temperature (°C):	10/1.5	Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒																																																																								
Received Intact:	Yes	No		Thermometer ID	128																																																																								
Cooler Custody Seals:	Yes	No		Correction Factor:																																																																									
Sample Custody Seals:	Yes	No		Total Containers:																																																																									
<table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Matrix</th> <th>Date Sampled</th> <th>Time Sampled</th> <th>Depth</th> <th>Number of Containers</th> <th>Chlorides</th> <th>TDS</th> </tr> </thead> <tbody> <tr> <td>NM-MW-11-200830</td> <td>GW</td> <td>10/08/20</td> <td>1145</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>NM-MW-13-200830</td> <td>GW</td> <td>10/08/20</td> <td>1345</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>NM-MW-13-200830</td> <td>GW</td> <td>10/08/20</td> <td>1315</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>NM-MW-15-200830</td> <td>GW</td> <td>10/08/20</td> <td>1115</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>NM-MW-17-200830</td> <td>GW</td> <td>10/08/20</td> <td>1245</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>NM-MW-20-200830</td> <td>GW</td> <td>10/08/20</td> <td>1645</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>NM-MW-21-200830</td> <td>GW</td> <td>10/08/20</td> <td>1715</td> <td>-</td> <td>1</td> <td>X</td> <td>X</td> </tr> <tr> <td>Dup-2</td> <td>GW</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS	NM-MW-11-200830	GW	10/08/20	1145	-	1	X	X	NM-MW-13-200830	GW	10/08/20	1345	-	1	X	X	NM-MW-13-200830	GW	10/08/20	1315	-	1	X	X	NM-MW-15-200830	GW	10/08/20	1115	-	1	X	X	NM-MW-17-200830	GW	10/08/20	1245	-	1	X	X	NM-MW-20-200830	GW	10/08/20	1645	-	1	X	X	NM-MW-21-200830	GW	10/08/20	1715	-	1	X	X	Dup-2	GW						
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS																																																																						
NM-MW-11-200830	GW	10/08/20	1145	-	1	X	X																																																																						
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NM-MW-13-200830	GW	10/08/20	1315	-	1	X	X																																																																						
NM-MW-15-200830	GW	10/08/20	1115	-	1	X	X																																																																						
NM-MW-17-200830	GW	10/08/20	1245	-	1	X	X																																																																						
NM-MW-20-200830	GW	10/08/20	1645	-	1	X	X																																																																						
NM-MW-21-200830	GW	10/08/20	1715	-	1	X	X																																																																						
Dup-2	GW																																																																												
Sample Comments TAT starts the day received by the lab, if received by 4:30pm																																																																													

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/9			2
		10/9			4
					6

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10.09.2020 10.19.00 AM

Work Order #: 674767

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.5
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

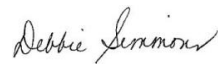
Checklist completed by:



Brianna Teel

Date: 10.09.2020

Checklist reviewed by:



Debbie Simmons

Date: 10.12.2020

Certificate of Analysis Summary 674947



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 10.13.2020 08:52

Report Date: 10.22.2020 17:10

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674947-001	674947-002	674947-003	674947-004	674947-005	674947-006
	Field Id:	MW-15-W-201210	MW-16-W-201210	MW-14-W-201210	MW-4-W-201210	MW-3-W-201210	MW-13-W-201210
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.12.2020 10:15	10.12.2020 10:30	10.12.2020 10:45	10.12.2020 11:00	10.12.2020 11:15	10.12.2020 11:30
Inorganic Anions by EPA 300/300.1	Extracted:	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00
	Analyzed:	10.14.2020 11:37	10.14.2020 11:20	10.14.2020 11:42	10.14.2020 11:48	10.14.2020 11:54	10.14.2020 12:11
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		1110 10.0	411 5.00	1810 25.0	343 5.00	671 5.00	1820 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		2010 5.00	1060 5.00	3270 5.00	903 5.00	1380 5.00	4140 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674947



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 10.13.2020 08:52

Report Date: 10.22.2020 17:10

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674947-007	674947-008	674947-009	674947-010	674947-011	674947-012
	Field Id:	MW-21-W-201210	MW-17-W-201210	MW-17-WD-201210	MW-22-W-201210	MW-23-W-201210	MW-30-W-201210
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.12.2020 11:45	10.12.2020 12:15	10.12.2020 12:15	10.12.2020 12:30	10.12.2020 12:45	10.12.2020 13:00
Inorganic Anions by EPA 300/300.1	Extracted:	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00
	Analyzed:	10.14.2020 12:16	10.14.2020 12:22	10.14.2020 12:27	10.14.2020 12:33	10.14.2020 12:56	10.14.2020 13:01
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		6840 25.0	8280 50.0	8680 50.0	13000 50.0	5450 25.0	2240 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		10900 5.00	13500 5.00	14900 5.00	19900 5.00	8810 5.00	4090 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674947



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 10.13.2020 08:52

Report Date: 10.22.2020 17:10

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674947-013	674947-014	674947-015	674947-016	674947-017	674947-018
	Field Id:	Livermore-W-201210	MW-5-W-201210	MW-8-W-201210	MW-9-W-201210	DHU-FWS-W-201210	MW-27-W-201210
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.12.2020 13:15	10.12.2020 13:30	10.12.2020 13:45	10.12.2020 14:00	10.12.2020 14:15	10.12.2020 14:30
Inorganic Anions by EPA 300/300.1	Extracted:	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00	10.14.2020 10:00
	Analyzed:	10.14.2020 13:18	10.14.2020 12:39	10.14.2020 13:24	10.14.2020 13:29	10.14.2020 13:35	10.14.2020 13:41
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		2450 25.0	267 5.00	1040 10.0	2710 25.0	650 25.0	2490 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		4430 5.00	974 5.00	2480 5.00	4270 5.00	3240 5.00	4200 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674947



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 10.13.2020 08:52

Report Date: 10.22.2020 17:10

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674947-019	674947-020	674947-021	674947-022	674947-023	674947-024
	Field Id:	MW-20-W-201210	MW-10-W-201210	MW-10-WD-201210	MW-26-W-201210	MW-24-W-201210	MW-19-W-201210
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.12.2020 14:45	10.12.2020 15:15	10.12.2020 15:15	10.12.2020 15:30	10.12.2020 15:45	10.12.2020 16:00
Inorganic Anions by EPA 300/300.1	Extracted:	10.14.2020 10:00	10.14.2020 10:00	10.15.2020 10:30	10.15.2020 10:30	10.15.2020 10:30	10.15.2020 10:30
	Analyzed:	10.14.2020 13:46	10.14.2020 13:52	10.15.2020 11:34	10.15.2020 11:39	10.15.2020 11:44	10.15.2020 11:49
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		1350 10.0	5270 25.0	4990 25.0	1500 25.0	4330 25.0	7990 50.0
TDS by SM2540C	Extracted:						
	Analyzed:	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		2470 5.00	8250 5.00	8340 5.00	3320 5.00	9440 5.00	16800 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 674947



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 10.13.2020 08:52

Report Date: 10.22.2020 17:10

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	674947-025	674947-026	674947-027	674947-028	674947-029	674947-030
	Field Id:	MW-18-W-201210	MW-25-W-201210	MW-12-W-201210	MW-31-W-201210	MW-11-W-201210	MW-6-W-201210
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	10.12.2020 16:15	10.12.2020 16:30	10.12.2020 16:45	10.12.2020 17:00	10.12.2020 17:15	10.12.2020 17:30
Inorganic Anions by EPA 300/300.1	Extracted:	10.15.2020 10:30	10.15.2020 10:30	10.15.2020 10:30	10.15.2020 10:30	10.15.2020 10:30	10.19.2020 12:05
	Analyzed:	10.15.2020 12:10	10.15.2020 12:15	10.15.2020 12:20	10.15.2020 12:25	10.15.2020 12:31	10.19.2020 14:25
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		21600 100	24100 100	13600 50.0	10200 50.0	68.2 50.0	423 10.0
TDS by SM2540C	Extracted:						
	Analyzed:	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38	10.13.2020 16:38
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		34100 5.00	36900 5.00	24700 5.00	16700 5.00	11800 5.00	1440 5.00

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Analytical Report 674947

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

10.22.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.22.2020

Project Manager: **Nick Casten**
GHD Services, INC- Midland
2135 S Loop 250 W
Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **674947**
Dollarhide
Project Address: New Mexico

Nick Casten:

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 Eurofins Xenco, LLC Report Number(s) 674947. 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 Eurofins Xenco, LLC. 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. 674947 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Debbie Simmons".

Debbie Simmons
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-15-W-201210	W	10.12.2020 10:15		674947-001
MW-16-W-201210	W	10.12.2020 10:30		674947-002
MW-14-W-201210	W	10.12.2020 10:45		674947-003
MW-4-W-201210	W	10.12.2020 11:00		674947-004
MW-3-W-201210	W	10.12.2020 11:15		674947-005
MW-13-W-201210	W	10.12.2020 11:30		674947-006
MW-21-W-201210	W	10.12.2020 11:45		674947-007
MW-17-W-201210	W	10.12.2020 12:15		674947-008
MW-17-WD-201210	W	10.12.2020 12:15		674947-009
MW-22-W-201210	W	10.12.2020 12:30		674947-010
MW-23-W-201210	W	10.12.2020 12:45		674947-011
MW-30-W-201210	W	10.12.2020 13:00		674947-012
Livermore-W-201210	W	10.12.2020 13:15		674947-013
MW-5-W-201210	W	10.12.2020 13:30		674947-014
MW-8-W-201210	W	10.12.2020 13:45		674947-015
MW-9-W-201210	W	10.12.2020 14:00		674947-016
DHU-FWS-W-201210	W	10.12.2020 14:15		674947-017
MW-27-W-201210	W	10.12.2020 14:30		674947-018
MW-20-W-201210	W	10.12.2020 14:45		674947-019
MW-10-W-201210	W	10.12.2020 15:15		674947-020
MW-10-WD-201210	W	10.12.2020 15:15		674947-021
MW-26-W-201210	W	10.12.2020 15:30		674947-022
MW-24-W-201210	W	10.12.2020 15:45		674947-023
MW-19-W-201210	W	10.12.2020 16:00		674947-024
MW-18-W-201210	W	10.12.2020 16:15		674947-025
MW-25-W-201210	W	10.12.2020 16:30		674947-026
MW-12-W-201210	W	10.12.2020 16:45		674947-027
MW-31-W-201210	W	10.12.2020 17:00		674947-028
MW-11-W-201210	W	10.12.2020 17:15		674947-029
MW-6-W-201210	W	10.12.2020 17:30		674947-030



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 674947

Report Date: 10.22.2020
Date Received: 10.13.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-15-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-001 Date Collected: 10.12.2020 10:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1110	10.0	0.421	mg/L	10.14.2020 11:37		20

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2010	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-16-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-002 Date Collected: 10.12.2020 10:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	411	5.00	0.210	mg/L	10.14.2020 11:20		10

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1060	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-14-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-003 Date Collected: 10.12.2020 10:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1810	25.0	1.05	mg/L	10.14.2020 11:42		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3270	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-4-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-004

Date Collected: 10.12.2020 11:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	343	5.00	0.210	mg/L	10.14.2020 11:48		10

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	903	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-3-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-005 Date Collected: 10.12.2020 11:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	671	5.00	0.210	mg/L	10.14.2020 11:54		10

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1380	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-13-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-006 Date Collected: 10.12.2020 11:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1820	25.0	1.05	mg/L	10.14.2020 12:11		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4140	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-21-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-007

Date Collected: 10.12.2020 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6840	25.0	1.05	mg/L	10.14.2020 12:16		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	10900	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-17-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-008 Date Collected: 10.12.2020 12:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8280	50.0	2.10	mg/L	10.14.2020 12:22		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	13500	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-17-WD-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-009

Date Collected: 10.12.2020 12:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8680	50.0	2.10	mg/L	10.14.2020 12:27		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	14900	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-22-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-010

Date Collected: 10.12.2020 12:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13000	50.0	2.10	mg/L	10.14.2020 12:33		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	19900	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-23-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-011

Date Collected: 10.12.2020 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5450	25.0	1.05	mg/L	10.14.2020 12:56		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8810	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-30-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-012 Date Collected: 10.12.2020 13:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2240	25.0	1.05	mg/L	10.14.2020 13:01		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4090	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **Livermore-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-013

Date Collected: 10.12.2020 13:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2450	25.0	1.05	mg/L	10.14.2020 13:18		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4430	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: MW-5-W-201210

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-014

Date Collected: 10.12.2020 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	267	5.00	0.210	mg/L	10.14.2020 12:39		10

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	974	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-8-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-015 Date Collected: 10.12.2020 13:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1040	10.0	0.421	mg/L	10.14.2020 13:24		20

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2480	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-9-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-016

Date Collected: 10.12.2020 14:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2710	25.0	1.05	mg/L	10.14.2020 13:29		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4270	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **DHU-FWS-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-017

Date Collected: 10.12.2020 14:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	650	25.0	1.05	mg/L	10.14.2020 13:35		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3240	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-27-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-018 Date Collected: 10.12.2020 14:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2490	25.0	1.05	mg/L	10.14.2020 13:41		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4200	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-20-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-019 Date Collected: 10.12.2020 14:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1350	10.0	0.421	mg/L	10.14.2020 13:46		20

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2470	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-10-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-020 Date Collected: 10.12.2020 15:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.14.2020 10:00

% Moisture:

Seq Number: 3139735

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5270	25.0	1.05	mg/L	10.14.2020 13:52		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139939

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8250	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-10-WD-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-021

Date Collected: 10.12.2020 15:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4990	25.0	1.05	mg/L	10.15.2020 11:34		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8340	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-26-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-022 Date Collected: 10.12.2020 15:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1500	25.0	1.05	mg/L	10.15.2020 11:39		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3320	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-24-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-023 Date Collected: 10.12.2020 15:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4330	25.0	1.05	mg/L	10.15.2020 11:44		50

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	9440	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-19-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-024 Date Collected: 10.12.2020 16:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7990	50.0	2.10	mg/L	10.15.2020 11:49		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	16800	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-18-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-025 Date Collected: 10.12.2020 16:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21600	100	4.21	mg/L	10.15.2020 12:10		200

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	34100	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-25-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-026 Date Collected: 10.12.2020 16:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24100	100	4.21	mg/L	10.15.2020 12:15		200

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	36900	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-12-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-027

Date Collected: 10.12.2020 16:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13600	50.0	2.10	mg/L	10.15.2020 12:20		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	24700	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-31-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-028 Date Collected: 10.12.2020 17:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10200	50.0	2.10	mg/L	10.15.2020 12:25		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	16700	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-11-W-201210** Matrix: Ground Water Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-029 Date Collected: 10.12.2020 17:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.15.2020 10:30

% Moisture:

Seq Number: 3139836

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	68.2	50.0	2.10	mg/L	10.15.2020 12:31		100

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	11800	5.00	5.00	mg/L	10.13.2020 16:38		1



Certificate of Analytical Results 674947

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-6-W-201210**

Matrix: Ground Water

Date Received: 10.13.2020 08:52

Lab Sample Id: 674947-030

Date Collected: 10.12.2020 17:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: CHE

Date Prep: 10.19.2020 12:05

% Moisture:

Seq Number: 3140092

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	423	10.0	0.421	mg/L	10.19.2020 14:25		20

Analytical Method: TDS by SM2540C

Tech: CHE

Analyst: CHE

% Moisture:

Seq Number: 3139957

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1440	5.00	5.00	mg/L	10.13.2020 16:38		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. **ND** Not Detected.

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



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139735

Matrix: Water

Prep Method: E300P

Date Prep: 10.14.2020

MB Sample Id: 7713260-1-BLK

LCS Sample Id: 7713260-1-BKS

LCSD Sample Id: 7713260-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	26.2	105	25.7	103	90-110	2	20	mg/L	10.14.2020 11:08	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139836

Matrix: Water

Prep Method: E300P

Date Prep: 10.15.2020

MB Sample Id: 7713304-1-BLK

LCS Sample Id: 7713304-1-BKS

LCSD Sample Id: 7713304-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	24.6	98	24.7	99	90-110	0	20	mg/L	10.15.2020 10:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3140092

Matrix: Water

Prep Method: E300P

Date Prep: 10.19.2020

MB Sample Id: 7713496-1-BLK

LCS Sample Id: 7713496-1-BKS

LCSD Sample Id: 7713496-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.0210	25.0	25.6	102	25.6	102	90-110	0	20	mg/L	10.19.2020 14:12	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139735

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.14.2020

Parent Sample Id: 674947-002

MS Sample Id: 674947-002 S

MSD Sample Id: 674947-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	411	250	666	102	669	103	90-110	0	20	mg/L	10.14.2020 11:25	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139735

Matrix: Ground Water

Prep Method: E300P

Date Prep: 10.14.2020

Parent Sample Id: 674947-014

MS Sample Id: 674947-014 S

MSD Sample Id: 674947-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	267	250	533	106	525	103	90-110	2	20	mg/L	10.14.2020 12:44	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139836

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 10.15.2020

Parent Sample Id: 675161-001

MS Sample Id: 675161-001 S

MSD Sample Id: 675161-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.5	25.0	43.5	108	44.8	113	90-110	3	20	mg/L	10.15.2020 11:19	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



GHD Services, INC- Midland Dollarhide

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139836

Matrix: Drinking Water

Prep Method: E300P

Parent Sample Id: 675162-001

MS Sample Id: 675162-001 S

Date Prep: 10.15.2020

MSD Sample Id: 675162-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.5	25.0	40.4	108	40.1	106	90-110	1	20	mg/L	10.15.2020 12:43	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3140092

Matrix: Ground Water

Prep Method: E300P

Parent Sample Id: 674947-030

MS Sample Id: 674947-030 S

Date Prep: 10.19.2020

MSD Sample Id: 674947-030 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	423	500	973	110	973	110	90-110	0	20	mg/L	10.19.2020 14:31	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3140092

Matrix: Water

Prep Method: E300P

Parent Sample Id: 675308-010

MS Sample Id: 675308-010 S

Date Prep: 10.19.2020

MSD Sample Id: 675308-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	435	250	720	114	709	110	90-110	2	20	mg/L	10.20.2020 09:44	X

Analytical Method: TDS by SM2540C

Seq Number: 3139939

Matrix: Water

MB Sample Id: 3139939-1-BLK

LCS Sample Id: 3139939-1-BKS

LCSD Sample Id: 3139939-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	987	99	980	98	80-120	1	10	mg/L	10.13.2020 16:38	

Analytical Method: TDS by SM2540C

Seq Number: 3139957

Matrix: Water

MB Sample Id: 3139957-1-BLK

LCS Sample Id: 3139957-1-BKS

LCSD Sample Id: 3139957-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	990	99	981	98	80-120	1	10	mg/L	10.13.2020 16:38	

Analytical Method: TDS by SM2540C

Seq Number: 3139939

Matrix: Ground Water

Parent Sample Id: 674947-001

MD Sample Id: 674947-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	2010	1890	6	10	mg/L	10.13.2020 16:38	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3139939

Matrix: Ground Water

Parent Sample Id: 674947-011

MD Sample Id: 674947-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8810	8640	2	10	mg/L	10.13.2020 16:38	

Analytical Method: TDS by SM2540C

Seq Number: 3139957

Matrix: Ground Water

Parent Sample Id: 674947-021

MD Sample Id: 674947-021 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8340	8910	7	10	mg/L	10.13.2020 16:38	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 674947

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:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.Knight@gnd.com & Britanny.White@gnd.com & edds@gnd.com
Project Name:	Dollarhide	Turn Around	
Project Number:	55270	Routine	☒
P.O. Number:	34032659	Rush:	
Sampler's Name:	Matthew Laughlin	Due Date:	

SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐	Thermometer ID		ANALYSIS REQUEST										Work Order Notes	
Temperature (°C):	32/3-7	Received Intact:	Yes ☒ No ☐	Correction Factor:	1.00	Sample Custody Seals:		Yes ☒ No ☐		Total Containers:						TAT starts the day received by the lab, if received by 4:30pm			
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number of Containers		Chlorides		TDS						Sample Comments			
MW-15-W-201310	GW	6W	10/13/30	1015	-	1	X	X											
MW-16-W-201310	6W	10/13/30	1030	-	1	X	X												
MW-14-W-201310	6W	10/13/30	1045	-	1	X	X												
MW-4-W-201310	6W	10/13/30	1100	-	1	X	X												
MW-3-W-201310	6W	10/13/30	1115	-	1	X	X												
MW-13-W-201310	6W	10/13/30	1130	-	1	X	X												
MW-21-W-201310	6W	10/13/30	1145	-	1	X	X												
MW-17-W-201310	6W	10/13/30	1215	-	1	X	X												
MW-12-W-201310	6W	10/13/30	1215	-	1	X	X												
MW-22-W-201310	6W	10/13/30	1230	-	1	X	X												

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/13/30			
		853			



Chain of Custody

Work Order No. 674947

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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Page 2 of 3

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc.- 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY, 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.knight@gnd.com & Britiany.White@gnd.com & edds@gnd.com
Project Name:		Turn Around	
Project Number:	55270	Routine	☒
P.O. Number:	34032659	Rush:	
Sampler's Name:	Matthew Langford	Due Date:	
SAMPLE RECEIPT Temp Blank: ☐ Yes ☒ No Wet Ice: ☐ Yes ☒ No Temperature (°C): 3.3/3.7 Thermometer ID: 128 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	ANALYSIS REQUEST												Work Order Notes	
						Chlorides	TDS												
MW-23-W-201210	GW	10/13/20	1245	-	1	X	X												
MW-30-W-201310	GW	10/12/20	1300	-	1	X	X												
Livezone-W-201310	GW	10/12/20	1315	-	1	X	X												
MW-5-W-201210	GW	10/13/20	1330	-	1	X	X												
MW-8-W-201210	GW	10/13/20	1345	-	1	X	X												
MW-9-W-201210	GW	10/13/20	1400	-	1	X	X												
MW-FW5-W-201310	GW	10/13/20	1415	-	1	X	X												
MW-37-W-201310	GW	10/13/20	1430	-	1	X	X												
MW-30-W-201210	GW	10/13/20	1445	-	1	X	X												
MW-10-W-201310	GW	10/13/20	1515	-	1	X	X												

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:		8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U												
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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	2 <i>[Signature]</i>	10/13	3 <i>[Signature]</i>	4 <i>[Signature]</i>	853
5	6				



Chain of Custody

Work Order No: 674947

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
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Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@gnd.com
Company Name:	GHD	Company Name:	GHD Services Inc. - 340
Address:	2135 S. Loop 250 West	Address:	2055 Niagara Falls Blvd.
City, State ZIP:	Midland, TX. 79703	City, State ZIP:	Niagara Falls, NY. 14304
Phone:	225-292-9007	Email:	Nick Casten@gnd.com & Christopher.Knight@gnd.com & Brittany.White@gnd.com & eds@gnd.com
Project Name:		Turn Around	
Project Number:		55270	Routine ☒ Rush: ☐
P.O. Number:		34032659	Due Date:
Sampler's Name:		Matthew Laughlin	

SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Temperature (°C):	3.2/3.7	Thermometer ID	1128		
Received intact:	Yes ☒ No ☐	Correction Factor:			
Cooler Custody Seals:	Yes ☒ No ☐ N/A ☐	Total Containers:			
Sample Custody Seals:	Yes ☐ No ☒ N/A ☐				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TDS	ANALYSIS REQUEST										Work Order Notes
MW-10-W-201210	GW	10/12/20	1515	-	1	X	X											
MW-26-W-201210	GW	10/13/20	1530	-	1	X	X											
MW-24-W-201210	GW	10/13/20	1545	-	1	X	X											
MW-19-W-201210	GW	10/13/20	1600	-	1	X	X											
MW-18-W-201210	GW	10/13/20	1615	-	1	X	X											
MW-25-W-201210	GW	10/13/20	1630	-	1	X	X											
MW-12-W-201210	GW	10/13/20	1645	-	1	X	X											
MW-31-W-201210	GW	10/13/20	1700	-	1	X	X											
MW-11-W-201210	GW	10/13/20	1715	-	1	X	X											
MW-6-W-201210	GW	10/13/20	1730	-	1	X	X											

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/12			
		0850			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 10.13.2020 08.52.00 AM

Work Order #: 674947

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.7
#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)?	N/A
#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: AJA

PH Device/Lot#: 10BDH1991

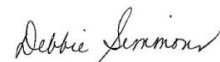
Checklist completed by:



Brianna Teel

Date: 10.13.2020

Checklist reviewed by:



Debbie Simmons

Date: 10.16.2020

Appendix C

Historical Groundwater Analytical Data

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
Monitor Wells			
43-K-1-MW			
	2/28/2007	6,200	11,400
	7/26/2007	7,250	13,500
	1/22/2008	7,360	12,500
	7/7/2008	7,460	14,300
	1/28/2009	8,210	14,500
	8/26/2009	9,140	16,700
	2/19/2010	7,560	15,000
	8/18/2010	10,600	17,900
	2/15/2011	11,900	15,400
	8/4/2011	11,600	19,800
	2/3/2012	9,560	19,900
	7/17/2015	8,870	16,700
	1/29/2016	NS	NS
	7/20/2016	8,470	13,800
	1/11/2017	8,360	15,400
	4/10/2017	NS	NS
	7/14/2017	8,550	14,000
	1/12/2018	8,020	10,500
	7/5/2018	7,840	12,700
	1/7/2019	7,130	9,640
	7/17/2019	7,050	11,000
	1/23/2020	6,570	11,300
	7/13/2020	7,440	10,700
44-I-1-MW			
	01/06	1,909	3,728
	04/06	1,349	2,823
	6/13/2006	1,300	2,930
	9/13/2006	1,340	2,620
	12/8/2006	1,370	3,010
	2/28/2007	1,310	2,840
	7/30/2007	1,440	3,010
	1/22/2008	1,630	2,730
	7/7/2008	1,480	2,910
	1/29/2009	1,510	2,870
	8/27/2009	1,500	2,850
	2/18/2010	1,140	2,800
	8/19/2010	1,610	2,840
	2/15/2011	1,970	2,850
	8/4/2011	1,770	3,060
	2/2/2012	1,550	3,470
	1/29/2013	1,850	3,300
	7/30/2013	1,640	3,550
	1/15/2014	1,860	3,730
	7/16/2014	2,100	5,180
	1/14/2015	2,000	4,690
	1/28/2016	2,430	3,500
	7/20/2016	2,620	6,220
	1/12/2017	3,290	6,250
	4/10/2017	NS	NS
	7/14/2017	2,750	6,700
	1/12/2018	2,940	5,030
	7/5/2018	3,170	5,450
	1/9/2019	3,320	4,580
	7/17/2019	3,400	5,510
	1/21/2020	3,540	6,040
	7/13/2020	3,660	5,840

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
44-J-1-MW			
	01/06	1,382	2,835
	03/06	1,551	3,139
	6/13/2006	1,550	3,570
	9/13/2006	1,910	3,270
	12/8/2006	1,810	3,090
	2/28/2007	1,600	3,530
	7/30/2007	1,830	3,480
	1/22/2008	2,090	3,390
	7/7/2008	1,960	3,780
	1/29/2009	1,870	4,070
	8/28/2009	2,480	4,050
	2/19/2010	1,850	4,480
	8/19/2010	2,600	4,440
	2/15/2011	2,630	4,960
	8/4/2011	2,890	5,740
	2/2/2012	2,740	5,900
	1/28/2016	NS	NS
	7/20/2016	2,440	5,980
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/14/2017	3,650	8,630
	1/12/2018	3,410	6,190
	7/5/2018	4,300	6,910
	1/9/2019	4,850	6,190
	7/17/2019	5,140	7,020
	1/21/2020	5,020	8,150
	7/13/2020	4,770	7,880
44-J-2-MW			
	01/06	1,380	2,870
	03/06	1,911	3,745
	6/13/2006	1,760	3,910
	9/13/2006	2,230	3,790
	12/8/2006	2,270	3,660
	2/28/2007	1,820	3,770
	7/30/2007	2,090	4,050
	1/22/2008	2,040	3,800
	7/7/2008	2,130	4,290
	1/29/2009	2,260	4,800
	8/28/2009	2,820	5,030
	2/18/2010	2,280	5,840
	8/20/2010	2,930	5,900
	2/15/2011	3,000	5,780
	8/5/2011	3,090	13,200
	2/2/2012	3,200	7,600
	1/28/2016	NS	NS
	7/20/2016	3,990	8,680
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/14/2017	4,160	10,000
	1/12/2018	4,560	7,820
	7/5/2018	5,050	8,000
	1/9/2019	4,930	7,020
	7/17/2019	5,170	7,870
	1/21/2020	3,830	6,420
	7/13/2020	5,120	8,210

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
44-J-3-MW			
	9/13/2006	2,580	4,850
	12/8/2006	2,690	4,790
	8/28/2009	3,330	5,820
	2/18/2010	2,580	4,980
	8/20/2010	3,430	5,940
	2/15/2011	3,660	6,340
	8/2/2011	3,090	5,970
	2/2/2012	2,810	5,640
	1/28/2016	NS	NS
	7/20/2016	3,630	7,810
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/20/2017	3,960	9,150
	1/12/2018	4,800	8,420
	7/5/2018	5,290	9,230
	1/9/2019	4,300	6,330
	7/17/2019	5,340	8,680
	1/21/2020	4,720	7,720
	7/13/2020	4,920	8,080
44-J-4-MW			
	9/13/2006	1,820	3,620
	12/8/2006	2,220	3,880
	8/27/2009	2,090	3,810
	2/18/2010	1,730	4,160
	8/20/2010	2,300	4,500
	2/15/2011	2,400	4,500
	8/2/2011	2,510	4,300
	2/3/2012	2,160	5,150
	1/28/2016	NS	NS
	7/20/2016	3,080	6,110
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/20/2017	2,750	6,260
	1/12/2018	3,660	7,250
	7/5/2018	4,520	7,430
	1/9/2019	4,470	6,130
	7/17/2019	4,240	6,850
	1/21/2020	6,120	10,500
	7/13/2020	4,450	8,020
44-J-5-MW			
	9/13/2006	1,740	3,360
	12/8/2006	1,570	3,260
	8/27/2009	1,650	3,870
	2/19/2010	1,660	3,940
	8/20/2010	2,150	4,260
	2/15/2011	2,530	4,030
	8/4/2011	2,430	4,320
	2/2/2012	2,260	4,920
	1/28/2016	NS	NS
	7/20/2016	2,710	5,470
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/20/2017	2,930	6,780
	1/12/2018	3,500	6,230
	7/5/2018	4,060	6,600
	1/9/2019	3,970	5,690
	7/17/2019	4,200	6,810
	1/21/2020	4,210	6,780
	7/13/2020	4,190	6,690

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Chevron Dollarhide Unit
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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
45-E-1-MW			
	01/06	994	1,795
	03/06	1,686	2,951
	6/14/2006	2,580	5,290
	9/12/2006	1,990	4,110
	12/7/2006	3,740	7,960
	2/28/2007	3,650	8,130
	7/30/2007	3,770	9,480
	1/22/2008	3,850	6,250
	7/7/2008	3,770	7,140
	1/28/2009	3,810	8,230
	8/27/2009	3,710	6,780
	2/18/2010	3,150	6,720
	8/17/2010	4,090	6,520
	2/15/2011	4,150	6,800
	8/2/2011	1,960	8,390
	2/2/2012	3,520	9,160
	1/28/2016	NS	NS
	7/20/2016	2,690	6,540
	1/12/2017	2,860	3,340
	4/10/2017	NS	NS
	7/20/2017	2,580	5,020
	1/12/2018	2,300	4,650
	7/5/2018	2,530	4,220
	1/9/2019	2,680	3,650
	7/17/2019	3,360	4,820
	1/21/2020	1,050	1,970
	7/13/2020	3,100	5,540
45-E-2-MW			
	01/06	98	601
	03/06	76	600
	6/14/2006	85	576
	9/12/2006	81	529
	12/7/2006	82	560
	2/28/2007	1,170	2,210
	7/30/2007	1,260	2,290
	1/22/2008	1,240	2,100
	7/7/2008	1,310	2,300
	1/28/2009	1,280	2,540
	8/26/2009	322	880
	2/18/2010	460	1,160
	8/18/2010	144	612
	2/15/2011	124	629
	8/2/2011	1,450	3,290
	2/2/2012	738	1,620
	1/28/2016	NS	NS
	7/20/2016	170	676
	1/12/2017	2,370	4,320
	4/10/2017	NS	NS
	7/20/2017	1,720	3,780
	1/12/2018	718	3,050
	7/5/2018	1,790	3,130
	1/9/2019	1,660	3,040
	7/17/2019	1,830	2,880
	1/21/2020	1,660	3,060
	7/13/2020	1,750	3,150

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
45-E-3-MW			
	2/28/2007	3,360	6,800
	7/26/2007	3,780	9,560
	1/22/2008	3,660	6,030
	7/7/2008	3,590	7,750
	1/28/2009	3,820	8,410
	8/26/2009	3,520	6,870
	2/18/2010	3,270	7,990
	8/18/2010	4,060	6,590
	2/15/2011	4,320	6,820
	8/2/2011	1,960	8,490
	2/3/2012	3,920	8,480
	1/28/2016	NS	NS
	7/20/2016	2,870	6,790
	1/11/2017	2,920	6,030
	4/10/2017	NS	NS
	7/20/2017	2,870	5,620
	1/12/2018	2,990	4,940
	7/5/2018	3,360	5,750
	1/9/2019	3,760	5,240
	7/17/2019	4,010	6,440
	1/23/2020	4,260	6,880
	7/13/2020	5,690	8,480
45-F-1-MW			
	01/06	619	1,270
	03/06	714	1,394
	6/13/2006	1,500	3,620
	9/12/2006	983	1,650
	12/8/2006	1,300	2,840
	2/28/2007	1,430	3,160
	7/30/2007	1,550	2,610
	1/22/2008	1,530	2,400
	7/7/2008	1,380	2,610
	1/29/2009	1,420	2,450
	8/27/2009	1,380	2,140
	2/18/2010	655	1,980
	8/18/2010	1,160	1,960
	2/15/2011	1,020	1,690
	8/2/2011	1,270	2,650
	2/3/2012	1,090	2,500
	1/28/2016	NS	NS
	7/20/2016	632	1,760
	1/12/2017	1,010	1,900
	4/10/2017	NS	NS
	7/20/2017	751	1,700
	1/12/2018	896	1,990
	7/5/2018	923	1,840
	1/9/2019	901	1,840
	7/17/2019	1,060	1,770
	1/21/2020	712	1,270
	7/13/2020	1,130	1,960

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
45-FF-MW			
	01/06	613	1,277
	03/06	3,090	5,086
	6/13/2006	3,870	11,500
	9/12/2006	4,610	7,280
	12/7/2006	4,910	10,600
	2/28/2007	5,060	8,960
	2/28/2007	4,890	11,100
	7/30/2007	5,020	8,780
	1/22/2008	5,160	9,100
	7/7/2008	5,220	9,870
	1/28/2009	4,900	8,540
	8/27/2009	5,760	9,120
	2/18/2010	3,210	7,340
	8/18/2010	5,830	9,360
	2/15/2011	6,000	10,200
	8/4/2011	5,510	12,100
	2/2/2012	4,360	9,680
	1/28/2016	NS	NS
	7/20/2016	3,990	9,940
	1/12/2017	4,800	11,200
	4/10/2017	NS	NS
	7/20/2017	4,170	8,030
	1/12/2018	4,820	8,280
	7/5/2018	5,310	9,090
	1/9/2019	5,080	6,690
	7/17/2019	6,060	7,320
	1/21/2020	4,320	7,510
	7/13/2020	4,120	6,850
58-B-1-MW			
	01/06	836	1,624
	3/6/2020	1,874	3,138
	6/14/2006	976	2,310
	9/12/2006	3,440	5,290
	12/7/2006	3,230	7,600
	2/28/2007	3,350	7,370
	7/26/2007	4,680	8,890
	1/22/2008	3,220	5,110
	7/7/2008	2,980	6,110
	1/28/2009	3,150	6,330
	8/26/2009	3,320	5,820
	2/18/2010	2,850	6,710
	8/19/2010	4,120	9,970
	2/15/2011	4,180	6,850
	8/2/2011	5,240	11,700
	2/6/2012	5,510	10,000
	1/28/2016	NS	NS
	7/22/2016	3,550	8,460
	1/13/2017	7,510	9,410
	4/10/2017	NS	NS
	7/20/2017	5,480	9,230
	1/12/2018	5,250	8,620
	7/5/2018	6,440	10,000
	1/7/2019	5,240	8,120
	7/15/2019	6,180	9,750
	1/21/2020	6,590	10,200
	7/14/2020	7,160	11,400

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
58-B-2-MW			
	01/06	1,103	2,024
	03/06	650	1,329
	6/14/2006	4,510	8,700
	9/12/2006	8,220	19,000
	12/7/2006	4,700	10,700
	2/28/2007	5,900	10,800
	7/26/2007	6,270	12,200
	1/22/2008	6,200	11,300
	7/7/2008	5,830	11,600
	1/28/2009	5,260	10,600
	8/26/2009	6,260	10,800
	2/18/2010	4,870	9,680
	8/19/2010	6,640	10,200
	2/15/2011	4,100	7,390
	8/2/2011	1,410	13,600
	2/6/2012	5,480	13,600
	1/28/2016	3,550	7,440
	7/22/2016	2,740	6,130
	1/13/2017	4,190	8,700
	4/10/2017	NS	NS
	7/20/2017	3,340	5,910
	1/12/2018	3,470	5,860
	7/5/2018	3,900	6,410
	1/7/2019	4,190	5,470
	7/15/2019	3,850	6,310
	1/21/2020	3,770	6,280
	7/14/2020	4,040	7,190
58-B-3-MW			
	2/28/2007	607	2,150
	7/26/2007	1,200	2,340
	1/22/2008	1,250	2,010
	7/7/2008	1,140	2,480
	1/28/2009	1,300	2,400
	8/26/2009	1,370	2,320
	2/19/2010	1,070	2,570
	8/19/2010	1,450	2,340
	2/15/2011	1,680	2,500
	8/2/2011	1,450	2,920
	2/3/2012	1,330	2,660
	1/29/2013	1,360	2,370
	7/30/2013	1,230	2,540
	1/15/2014	1,250	2,920
	7/16/2014	1,450	4,360
	1/14/2015	312	938
	7/15/2015	715	1,770
	1/28/2016	688	1,660
	7/22/2016	570	1,290
	1/10/2017	683	1,830
	4/10/2017	NS	NS
	7/20/2017	666	1,440
	1/12/2018	791	1,290
	7/6/2018	976	1,580
	1/7/2019	900	2,070
	7/12/2019	1,470	2,520
	1/23/2020	1,570	2,710
	7/14/2020	1,640	3,160

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-2			
	8/10/2015	204	1,950
	1/28/2016	NS	NS
	7/21/2016	NS	NS
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/19/2017	NS	NS
	10/5/2017	NS	NS
	1/12/2018	NS	NS
	4/5/2018	NS	NS
	7/6/2018	NS	NS
	10/4/2018	NS	NS
	1/8/2019	NS	NS
	4/10/2019	NS	NS
	7/16/2019	NS	NS
	10/17/2019	NS	NS
	1/22/2020	NS	NS
	4/13/2020	NS	NS
	7/15/2020	NS	NS
	7/13/2020	NS	NS
MW-3			
	8/10/2015	249	1,100
	1/27/2016	484	1,070
	7/21/2016	486	1,430
	1/11/2017	564	1,410
	4/10/2017	605	1,960
	7/19/2017	572	1,400
	10/5/2017	569	1,520
	1/12/2018	566	1,410
	4/5/2018	589	1,300
	7/3/2018	593	1,310
	10/4/2018	626	1,310
	1/8/2019	194	619
	4/9/2019	636	1,370
	7/16/2019	475	1,320
	10/17/2019	502	1,350
	1/22/2020	696	2,390
	4/13/2020	603	1,400
	7/15/2020	648	1,550
	10/12/2020	671	1,380
MW-4			
	8/10/2015	240	1,850
	1/27/2016	250	941
	7/21/2016	355	2,260
	1/11/2017	353	1,260
	4/10/2017	NS	NS
	7/20/2017	325	1,000
	10/5/2017	347	1,010
	1/12/2018	345	968
	4/6/2018	350	413
	7/3/2018	338	831
	10/4/2018	350	883
	1/8/2019	258	426
	4/9/2019	377	877
	7/16/2019	269	889
	10/17/2019	325	902
	1/22/2020	375	578
	4/13/2020	323	939
	7/15/2020	352	1,050
	10/12/2020	343	903

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-5			
	8/10/2015	837	2,960
	1/28/2016	459	2,130
	7/21/2016	397	1,690
	1/11/2017	364	1,400
	4/10/2017	346	1,560
	7/19/2017	309	1,170
	10/5/2017	302	1,040
	1/12/2018	293	1,130
	4/5/2018	289	1,140
	7/3/2018	274	1,020
	10/4/2018	278	1,050
	1/8/2019	244	1,050
	4/9/2019	300	257
	7/16/2019	219	1,120
	10/17/2019	257	1,000
	1/22/2020	262	964
	4/13/2020	265	986
	7/15/2020	267	1,090
	10/12/2020	267	974
MW-6			
	8/10/2015	578	2,180
	1/28/2016	484	2,090
	7/21/2016	450	1,590
	1/11/2017	441	1,330
	4/10/2017	468	1,760
	7/18/2017	439	1,650
	10/5/2017	407	1,530
	1/12/2018	408	1,490
	4/5/2018	411	1,430
	7/3/2018	402	1,340
	10/4/2018	404	1,450
	1/8/2019	372	1,510
	4/9/2019	418	1,500
	7/15/2019	395	1,470
	10/17/2019	383	1,490
	1/23/2020	488	1,550
	4/14/2020	387	1,530
	7/15/2020	417	1,590
	10/12/2020	423	1,440
MW-7			
	8/10/2015	772	3,230
	1/28/2016	260	2,620
	7/21/2016	524/508	2,510/2,410
	1/12/2017	NS	NS
	4/10/2017	NS	NS
	7/19/2017	NS	NS
	10/5/2017	NS	NS
	1/12/2018	NS	NS
	4/5/2018	NS	NS
	7/3/2018	NS	NS
	10/4/2018	NS	NS
	1/8/2019	NS	NS
	4/10/2019	NS	NS
	7/15/2019	NS	NS
	10/17/2019	NS	NS
	1/23/2020	NS	NS
	4/14/2020	NS	NS
	7/15/2020	NS	NS
	10/12/2020	NS	NS

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-8			
	8/10/2015	711	2,430
	1/28/2016	763	2,310
	7/21/2016	758	2,140
	1/13/2017	985	2,410
	4/7/2017	933	2,120
	7/17/2017	845	2,280
	10/4/2017	803	2,210
	1/12/2018	813	2,250
	4/5/2018	839	2,300
	7/5/2018	868	2,350
	10/3/2018	888	2,490
	1/8/2019	852	2,160
	4/5/2019	1,060	2,460
	7/15/2019	884	2,390
	10/16/2019	919	2,400
	1/21/2020	967	2,540
	4/14/2020	750	2,370
	7/14/2020	1,010	2,460
	10/12/2020	1,040	2,480
MW-9			
	8/10/2015	1,650	3,390
	1/28/2016	2,160	4,410
	7/21/2016	2,140	6,790
	1/13/2017	3,520	4,540
	4/7/2017	3,070	6,760
	7/17/2017	2,830	4,930
	10/4/2017	2,230	4,730
	1/12/2018	2,540	4,380
	4/5/2018	2,930	4,690
	7/5/2018	2,880	4,250
	10/3/2018	2,910	4,270
	1/7/2019	2,620	807
	4/5/2019	1,200	4,230
	7/15/2019	2,620	4,240
	10/16/2019	2,520	4,610
	1/21/2020	2,740	4,010
	4/14/2020	1,800	4,100
	7/14/2020	2,700	5,070
	10/12/2020	2,710	4,270
MW-10			
	8/10/2015	3,480	7,980
	1/28/2016	5,320	9,850
	7/20/2016	5,920	12,400
	1/12/2017	6,360	10,500
	4/7/2017	5,930	12,700
	7/18/2017	5,320	9,720
	10/5/2017	5,190	8,560
	1/12/2018	5,350	9,650
	4/5/2018	5,470	8,630
	7/3/2018	5,340	11,000
	10/3/2018	5,880	8,570
	1/8/2019	5,130	7,050
	4/5/2019	5,760	8,100
	7/15/2019	4,860	8,210
	10/16/2019	4,980	8,520
	1/23/2020	5,230	8,580
	4/14/2020	3,260	8,730
	7/15/2020	5,130	9,450
	10/12/2020	5,270	8,250

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-11			
	8/10/2015	458	3,260
	1/28/2016	5,280	5,720
	7/21/2016	6,830	16,100
	1/11/2017	7,310	18,800
	4/10/2017	7,760	17,100
	7/18/2017	7,620	12,700
	10/5/2017	7,110	12,600
	1/12/2018	8,120	12,700
	4/5/2018	7,990	11,000
	7/3/2018	7,940	11,800
	10/4/2018	8,310	12,000
	1/8/2019	8,240	9,730
	4/9/2019	7,840	11,700
	7/15/2019	7,680	11,800
	10/17/2019	7,590	12,400
	1/23/2020	7,760	12,300
	4/14/2020	7,620	13,400
	7/15/2020	6,240	12,000
	10/12/2020	68.2	11,800
MW-12			
	8/10/2015	7,680	20,500
	1/28/2016	12,800	24,400
	7/20/2016	12,000	27,500
	1/11/2017	16,400	24,100
	4/7/2017	13,900	28,900
	7/18/2017	13,600	23,000
	10/5/2017	14,000	23,000
	1/12/2018	13,100	21,400
	4/5/2018	13,300	19,400
	7/3/2018	13,200	20,200
	10/4/2018	15,000	24,400
	1/8/2019	13,900	14,000
	4/10/2019	14,100	21,700
	7/15/2019	11,000	22,600
	10/16/2019	12,600	23,400
	1/23/2020	12,700	20,600
	4/14/2020	13,600	23,400
	7/15/2020	12,700	22,700
	10/12/2020	13,600	24,700
MW-13			
	8/10/2015	1,740	4,100
	1/28/2016	1,850	4,110
	7/21/2016	1,650	5,300
	1/11/2017	1,270	1,660
	4/10/2017	1,890	4,760
	7/19/2017	1,730	4,010
	10/5/2017	1,910	5,260
	1/12/2018	1,750	3,920
	4/6/2018	1,750	3,920
	7/3/2018	2,280	4,560
	10/4/2018	2,200	3,900
	1/8/2019	1,880	3,810
	4/10/2019	2,020	4,160
	7/16/2019	1,400	4,440
	10/17/2019	1,960	3,720
	1/22/2020	1,810	5,110
	4/13/2020	1,580	4,420
	7/15/2020	1,750	4,350
	10/12/2020	1,820	4,140

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-14			
	8/11/2015	989	3,040
	1/27/2016	1,420	2,560
	7/21/2016	1,480	3,800
	1/11/2017	1,470	2,890
	4/10/2017	1,530	4,400
	7/19/2017	1,500	3,330
	10/5/2017	1,510	3,460
	1/12/2018	1,590	2,910
	4/6/2018	1,720	1,270
	7/3/2018	1,540	2,660
	10/4/2018	1,690	2,620
	1/8/2019	1,630	2,890
	4/9/2019	1,610	2,940
	7/16/2019	1,110	3,120
	10/17/2019	1,670	2,940
	1/22/2020	1,880	3,290
	4/13/2020	1,130	3,130
	7/15/2020	1,760	3,640
	10/12/2020	1,810	3,270
MW-15			
	8/11/2015	600	1,730
	1/28/2016	617	1,180
	7/21/2016	554	1,370
	1/11/2017	710	1,640
	4/10/2017	785	2,030
	7/19/2017	652	1,220
	10/5/2017	831	1,690
	1/12/2018	873	1,770
	4/6/2018	877	1,900
	7/3/2018	914	1,650
	10/4/2018	1,030	1,740
	1/8/2019	995	2,290
	4/10/2019	1,110	1,740
	7/16/2019	1,300	1,800
	10/17/2019	1,010	1,850
	1/22/2020	1,290	2,180
	4/13/2020	1,010	1,960
	7/15/2020	1,110	2,330
	10/12/2020	1,110	2,010
MW-16			
	8/11/2015	435	1,410
	1/28/2016	323	1,020
	7/21/2016	195	776
	1/11/2017	472	1,180
	4/10/2017	396	1,400
	7/19/2017	444	1,100
	10/5/2017	426	1,210
	1/12/2018	364	1,100
	4/6/2018	432	1,310
	7/3/2018	430	1,160
	10/4/2018	474	1,210
	1/8/2019	468	1,260
	4/10/2019	508	1,240
	7/16/2019	301	1,060
	10/17/2019	393	1,110
	1/22/2020	525	1,270
	4/13/2020	310	1,030
	7/15/2020	505	1,390
	10/12/2020	411	1,060

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Chevron Dollarhide Unit
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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-17			
	8/12/2015	5,800	13,400
	1/28/2016	4,400	823
	7/21/2016	3,370	7,900
	1/11/2017	9,760	16,200
	4/10/2017	9,620	20,400
	7/19/2017	8,160	14,400
	10/6/2017	11,400	18,800
	1/12/2018	10,100	15,300
	4/6/2018	9,590	14,800
	7/3/2018	8,570	15,000
	10/4/2018	11,300	17,700
	1/8/2019	10,100	11,100
	4/10/2019	9,440	14,500
	7/16/2019	7,880	13,100
	10/17/2019	9,620	15,300
	1/22/2020	9,410	15,100
	4/13/2020	7,870	13,800
	7/15/2020	7,450	15,000
	10/12/2020	8,280	13,500
MW-18			
	8/12/2015	13,400	26,600
	1/28/2016	13,900	25,300
	7/20/2016	8,000	18,900
	1/12/2017	14,200	33,700
	4/7/2017	19,100	37,800
	7/18/2017	13,900	23,500
	10/6/2017	19,000	52,900
	1/12/2018	18,800	30,300
	4/5/2018	20,000	30,400
	7/3/2018	22,000	38,500
	10/4/2018	21,100	31,600
	1/8/2019	17,000	19,000
	4/9/2019	24,600	33,300
	7/15/2019	21,000	33,100
	10/16/2019	19,900	37,300
	1/23/2020	21,400	34,800
	4/14/2020	18,500	34,000
	7/15/2020	21,400	36,000
	10/12/2020	21,600	34,100
MW-19			
	8/12/2015	4,780	11,300
	1/28/2016	5,130	10,100
	7/20/2016	5,160	10,200
	1/12/2017	6,370	9,560
	4/7/2017	6,000	13,600
	7/18/2017	5,310	9,840
	10/6/2017	5,290	9,620
	1/12/2018	6,160	10,300
	4/5/2018	6,600	9,880
	7/5/2018	6,580	11,500
	10/4/2018	6,980	11,600
	1/8/2019	6,570	9,300
	4/9/2019	7,000	10,500
	7/15/2019	6,860	11,000
	10/16/2019	7,160	12,800
	1/23/2020	7,540	13,200
	4/14/2020	7,170	13,300
	7/15/2020	7,880	13,700
	10/12/2020	7,990	16,800

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-20			
	8/12/2015	995	2,760
	1/28/2016	1,200	2,390
	7/20/2016	1,060	2,920
	1/12/2017	1,500	1,970
	4/7/2017	1,200	3,300
	7/18/2017	1,110	2,540
	10/6/2017	1,100	2,220
	1/12/2018	1,130	2,410
	4/5/2018	1,100	2,130
	7/5/2018	1,150	2,160
	10/3/2018	1,340	2,490
	1/8/2019	1,070	2,180
	4/5/2019	1,430	2,410
	7/15/2019	1,270	2,330
	10/16/2019	1,260	2,500
	1/21/2020	1,330	2,440
	4/14/2020	1,140	2,970
	7/13/2020	1,320	2,450
	10/12/2020	1,350	2,470
MW-21			
	7/21/2016	7,920	19,400
	1/11/2017	7,360	11,800
	4/10/2017	6,600	17,900
	7/19/2017	5,480	12,200
	10/6/2017	7,210	13,500
	1/12/2018	6,800	10,900
	4/6/2018	7,630	11,000
	7/3/2018	6,860	11,100
	10/4/2018	7,400	11,400
	1/8/2019	7,530	9,420
	4/10/2019	6,970	11,000
	7/16/2019	6,720	11,000
	10/17/2019	7,010	11,000
	1/22/2020	6,900	10,300
	4/13/2020	6,610	10,200
	7/15/2020	5,850	10,700
	10/12/2020	6,840	10,900
MW-22			
	3/3/2017	12,100	19,000
	4/10/2017	14,000	33,000
	7/19/2017	8,720	17,400
	10/6/2017	11,400	20,200
	1/12/2018	10,400	16,200
	4/6/2018	10,500	17,200
	7/3/2018	10,300	16,300
	10/4/2018	14,200	18,700
	1/8/2019	12,000	10,900
	4/10/2019	10,900	16,200
	7/16/2019	11,300	18,000
	10/17/2019	12,400	20,600
	1/22/2020	11,700	16,800
	4/13/2020	11,700	19,800
	7/15/2020	10,100	21,900
	10/12/2020	13,000	19,900

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-23			
	7/21/2016	1,430	3,050
	1/11/2017	2,120	4,130
	4/10/2017	3,010	8,750
	7/19/2017	1,680	3,550
	10/6/2017	4,520	7,370
	1/12/2018	5,230	9,340
	4/6/2018	6,830	10,100
	7/3/2018	4,390	6,870
	10/4/2018	6,090	8,980
	1/8/2019	7,910	9,780
	4/10/2019	6,540	10,200
	7/16/2019	3,420	9,780
	10/17/2019	3,840	10,200
	1/22/2020	7,140	10,400
	4/13/2020	3,540	7,780
	7/15/2020	6,060	12,600
	10/12/2020	5,450	8,810
MW-24			
	7/20/2016	3,720	8,910
	1/12/2017	4,740	8,690
	4/7/2017	4,520	11,200
	7/18/2017	3,880	8,600
	10/6/2017	3,930	8,500
	1/12/2018	4,060	8,170
	4/5/2018	3,980	7,080
	7/3/2018	4,140	8,210
	10/4/2018	4,850	8,870
	1/8/2019	3,320	1,020
	4/9/2019	4,370	8,250
	7/15/2019	4,180	8,860
	10/16/2019	4,150	8,980
	1/23/2020	4,470	8,980
	4/14/2020	2,770	9,190
	7/15/2020	4,430	9,130
	10/12/2020	4,330	9,440
MW-25			
	7/21/2016	560	1,510
	1/11/2017	24,400	29,700
	4/10/2017	23,100	49,600
	7/18/2017	18,800	32,800
	10/6/2017	18,300	33,200
	1/12/2018	20,900	31,400
	4/5/2018	22,400	32,800
	7/3/2018	23,600	37,600
	10/4/2018	26,500	39,000
	1/8/2019	23,500	29,800
	4/9/2019	24,100	33,100
	7/15/2019	23,200	33,200
	10/17/2019	20,900	24,800
	1/23/2020	25,200	36,400
	4/14/2020	24,200	38,500
	7/15/2020	26,100	37,300
	10/12/2020	24,100	36,900

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-26			
	1/12/2017	1,220	2,840
	4/7/2017	1,190	3,160
	7/18/2017	1,140	3,060
	10/6/2017	1,120	2,570
	1/12/2018	1,160	2,860
	4/5/2018	1,230	2,730
	7/5/2018	1,210	2,810
	10/4/2018	1,340	2,750
	1/8/2019	1,190	2,740
	4/9/2019	1,340	2,830
	7/15/2019	1,360	2,960
	10/16/2019	1,340	3,250
	1/23/2020	1,460	3,220
	4/14/2020	1,230	3,260
	7/15/2020	1,480	3,520
	10/12/2020	1,500	3,320
MW-27			
	7/20/2016	1,340	3,080
	1/11/2017	2,400	4,160
	4/7/2017	2,380	4,520
	7/18/2017	2,110	4,150
	10/6/2017	2,280	4,610
	1/12/2018	2,260	4,220
	4/5/2018	2,400	4,250
	7/3/2018	2,510	4,790
	10/3/2018	3,030	4,700
	1/8/2019	2,420	4,110
	4/5/2019	2,830	4,490
	7/15/2019	2,540	4,440
	10/16/2019	2,490	4,160
	1/21/2020	2,420	4,230
	4/14/2020	1,770	4,170
	7/15/2020	2,950	5,120
	10/12/2020	2,490	4,200
MW-28			
	1/10/2017	917	2,520
	4/7/2017	1,090	2,650
	7/17/2017	1,190	2,730
	10/6/2017	1,240	3,270
	1/12/2018	1,470	1,280
	4/5/2018	1,540	2,660
	7/6/2018	1,610	2,540
	10/3/2018	1,760	3,020
	1/7/2019	1,510	3,050
	4/5/2019	851	3,260
	7/15/2019	2,180	3,490
	10/16/2019	2,410	3,780
	1/23/2020	2,450	4,100
	4/10/2020	2,400	4,080
	7/14/2020	3,370	6,510
	10/8/2020	3,780	8,160

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-29			
	1/10/2017	354	946
	4/7/2017	386	1,160
	7/17/2017	393	1,060
	10/6/2017	374	1,100
	1/12/2018	397	601
	4/5/2018	396	1,100
	7/6/2018	397	860
	10/3/2018	409	1,070
	1/7/2019	359	7,270
	4/5/2019	508	1,100
	7/15/2019	500	1,140
	10/16/2019	501	1,200
	1/23/2020	535	1,250
	4/10/2020	552	1,270
	7/14/2020	563	1,460
	10/8/2020	637	1,460
MW-30			
	7/19/2017	2,360	4,540
	10/6/2017	2,420	5,270
	1/12/2018	2,350	4,160
	4/6/2018	2,240	1,310
	7/3/2018	2,280	3,650
	10/4/2018	2,550	3,820
	1/8/2019	2,460	3,860
	4/10/2019	2,400	4,160
	7/16/2019	1,500	4,200
	10/17/2019	2,340	3,880
	1/22/2020	2,520	4,290
	4/14/2020	1,300	3,960
	7/15/2020	2,290	4,530
	10/12/2020	2,240	4,090
MW-31			
	7/18/2017	7,980	13,600
	10/6/2017	8,540	16,600
	1/12/2018	10,700	16,400
	4/5/2018	11,700	17,700
	7/3/2018	12,100	19,800
	10/4/2018	12,800	19,500
	1/8/2019	11,100	10,300
	4/5/2019	11,800	16,200
	7/15/2019	10,900	16,600
	10/16/2019	10,500	17,900
	1/23/2020	11,700	17,100
	4/14/2020	9,960	17,900
	7/15/2020	8,890	17,800
	10/12/2020	10,200	16,700
MW-32			
	4/10/2019	373	1,170
	7/15/2019	314	1,090
	10/15/2019	271	1,110
	1/23/2020	327	1,080
	4/10/2020	342	1,130
	7/15/2020	321	1,140
	10/8/2020	349	1,110

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
MW-33			
	4/10/2019	183	912
	7/15/2019	153	988
	10/15/2019	156	1,040
	1/23/2020	185	1,010
	4/10/2020	190	1,100
	7/14/2020	196	1,060
	10/8/2020	201	1,090
MW-34			
	4/10/2019	69.9	600
	7/15/2019	64.2	621
	10/15/2019	66.5	604
	1/23/2020	73.3	606
	4/10/2020	69.6	618
	7/14/2020	71.3	613
	10/8/2020	73.3	608
NM-MW-1			
	12/3/2015	266	1,540
	1/28/2016	283	1,470
	7/22/2016	294	1,420
	1/12/2017	383	1,570
	4/7/2017	291	1,510
	7/13/2017	287	1,520
	10/6/2017	271	1,500
	1/12/2018	271	933
	4/5/2018	263	1,400
	7/6/2018	275	1,350
	10/3/2018	279	1,460
	1/7/2019	256	1,370
	4/4/2019	330	1,400
	7/11/2019	291	1,380
	10/15/2019	281	1,450
	1/20/2020	286	1,390
	4/9/2020	277	1,440
	7/14/2020	293	1,450
	10/7/2020	288	1,450
NM-MW-2			
	12/3/2015	640	2,620
	1/28/2016	658	1,920
	7/22/2016	638	858
	1/12/2017	790	1,770
	4/7/2017	656	1,590
	7/13/2017	653	1,340
	10/6/2017	650	1,410
	1/12/2018	639	990
	4/5/2018	610	1,210
	7/6/2018	679	1,160
	10/3/2018	674	1,270
	1/7/2019	616	1,210
	4/4/2019	736	1,230
	7/11/2019	397	1,330
	10/15/2019	666	1,240
	1/20/2020	643	1,240
	4/9/2020	734	1,270
	7/14/2020	696	1,530
	10/7/2020	706	1,370

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
NM-MW-3			
	12/3/2015	648	3,900
	1/28/2016	327	1,870
	7/22/2016	121	524
	1/12/2017	224	581
	4/7/2017	161	564
	7/13/2017	186	592
	10/6/2017	276	626
	1/12/2018	221	501
	4/5/2018	180	601
	7/6/2018	220	625
	10/3/2018	246	708
	1/7/2019	447	1,250
	4/4/2019	259	653
	7/11/2019	184	581
	10/15/2019	183	596
	1/20/2020	241	649
	4/9/2020	255	721
	7/14/2020	261	811
	10/7/2020	253	731
NM-MW-4			
	12/3/2015	739	2,960
	1/28/2016	22.8	821
	7/22/2016	40.9	444
	1/12/2017	48.7	379
	4/7/2017	35.0	410
	7/13/2017	36.1	422
	10/6/2017	42.0	468
	1/12/2018	39	217
	4/5/2018	34	410
	7/6/2018	40.6	414
	10/3/2018	39.7	411
	1/7/2019	258	1,240
	4/4/2019	188	420
	7/11/2019	40.6	423
	10/15/2019	46.2	430
	1/20/2020	44.1	388
	4/9/2020	45.8	513
	7/14/2020	46.9	419
	10/7/2020	47.7	431
NM-MW-5			
	12/3/2015	NS	NS
	1/28/2016	144	1,250
	7/22/2016	129	1,270
	1/12/2017	182	1,320
	4/7/2017	145	1,260
	7/13/2017	147	1,340
	10/6/2017	144	1,090
	1/12/2018	133	893
	4/5/2018	134	1,300
	7/6/2018	140	1,240
	10/3/2018	138	1,290
	1/7/2019	142	1,280
	4/4/2019	175	1,240
	7/11/2019	149	1,290
	10/15/2019	170	1,320
	1/20/2020	152	1,240
	4/9/2020	158	1,310
	7/14/2020	162	1,250
	10/7/2020	155	1,330

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
NM-MW-6			
	12/2/2015	188	1,240
	1/28/2016	183	1,060
	7/22/2016	121	817
	1/12/2017	168	825
	4/7/2017	143	852
	7/13/2017	138	818
	10/6/2017	132	742
	1/12/2018	137	468
	4/5/2018	127	836
	7/6/2018	134	801
	10/3/2018	138	833
	1/7/2019	113	813
	4/4/2019	161	813
	7/12/2019	143	863
	10/15/2019	139	827
	1/20/2020	145	750
	4/9/2020	145	834
	7/14/2020	152	828
	10/7/2020	147	826
NM-MW-7			
	12/3/2015	696	3,200
	1/28/2016	1,840	3,150
	7/22/2016	1,890	5,320
	1/12/2017	2,390	3,770
	4/7/2017	2,180	4,770
	7/13/2017	2,120	4,100
	10/6/2017	2,070	4,200
	1/12/2018	2,110	2,370
	4/5/2018	2,090	4,270
	7/6/2018	2,330	3,780
	10/3/2018	2,380	4,050
	1/7/2019	2,040	5,190
	4/4/2019	1,940	4,160
	7/11/2019	2,600	4,390
	10/15/2019	2,370	4,240
	1/20/2020	2,450	4,410
	4/9/2020	2,460	4,620
	7/14/2020	2,360	5,250
	10/7/2020	2,270	4,860
NM-MW-8			
	3/3/2017	4,870	9,740
	4/7/2017	4,870	12,800
	7/13/2017	5,010	9,040
	10/4/2017	5,000	10,900
	1/12/2018	5,260	5,240
	4/5/2018	5,110	9,160
	7/6/2018	5,960	9,620
	10/3/2018	6,260	11,000
	1/7/2019	4,630	8,040
	4/4/2019	6,690	10,100
	7/11/2019	6,200	9,310
	10/15/2019	7,120	10,700
	1/20/2020	6,220	10,400
	4/9/2020	6,680	11,700
	7/14/2020	6,540	12,400
	10/7/2020	6,370	11,100

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Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
NM-MW-9			
	1/13/2017	NS	NS
	4/10/2017	NS	NS
	7/17/2017	224	776
	10/4/2017	263	813
	1/12/2018	221	717
	4/5/2018	234	804
	7/6/2018	252	785
	10/3/2018	258	799
	1/7/2019	2,620	4,160
	4/5/2019	297	786
	7/12/2019	264	797
	10/15/2019	243	812
	1/22/2020	555	1,090
	4/10/2020	263	833
	7/13/2020	271	852
	10/8/2020	256	811
NM-MW-10			
	1/10/2017	314	1,550
	4/7/2017	355	1,570
	7/17/2017	308	1,600
	10/4/2017	302	1,550
	1/12/2018	314	1,050
	4/5/2018	301	1,620
	7/6/2018	308	1,450
	10/3/2018	315	1,520
	1/7/2019	290	1,530
	4/4/2019	396	1,670
	7/12/2019	354	1,680
	10/15/2019	340	1,670
	1/20/2020	357	1,620
	4/10/2020	367	1,720
	7/13/2020	366	1,650
	10/8/2020	366	1,720
NM-MW-11			
	1/10/2017	190	2,100
	4/7/2017	158	1,980
	7/17/2017	135	2,020
	10/4/2017	154	1,940
	1/12/2018	155	1,710
	4/5/2018	699	1,920
	7/6/2018	143	1,820
	10/3/2018	152	1,920
	1/7/2019	154	1,840
	4/4/2019	185	1,870
	7/12/2019	157	1,980
	10/15/2019	134	1,530
	1/20/2020	161	1,870
	4/9/2020	160	1,990
	7/10/2020	178	2,120
	10/8/2020	181	1,960

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
NM-MW-12			
	3/3/2017	760	1,460
	4/7/2017	725	2,230
	7/17/2017	726	1,540
	10/4/2017	643	1,590
	1/12/2018	663	1,470
	4/5/2018	656	1,430
	7/6/2018	665	1,250
	10/3/2018	668	1,390
	1/7/2019	596	1,300
	4/4/2019	739	1,310
	7/12/2019	657	524
	10/15/2019	512	1,380
	1/20/2020	NS	NS
	4/10/2020	591	1,290
	7/10/2020	589	1,270
	10/8/2020	580	1,280
NM-MW-13			
	3/3/2017	183	1,020
	4/7/2017	192	1,110
	7/17/2017	185	1,100
	10/4/2017	183	1,100
	1/12/2018	188	965
	4/5/2018	180	1,090
	7/6/2018	184	1,050
	10/3/2018	185	1,110
	1/7/2019	165	1,070
	4/4/2019	225	1,090
	7/12/2019	199	1,090
	10/15/2019	179	1,100
	1/20/2020	203	1,060
	4/9/2020	201	1,090
	7/10/2020	212	1,130
	10/8/2020	211	1,100
NM-MW-14			
	2/18/2020	24.4	457
	4/10/2020	25.7	482
	7/13/2020	25.0	488
	10/8/2020	26.4	465
NM-MW-15			
	2/18/2020	55.9	499
	4/9/2020	55.6	530
	7/10/2020	57.3	509
	10/8/2020	59.9	521
NM-MW-16			
	2/18/2020	NS	NS
	4/9/2020	NS	NS
	7/10/2020	NS	NS
	10/8/2020	NS	NS
NM-MW-17			
	2/18/2020	160	989
	4/9/2020	198	1,070
	7/10/2020	211	978
	10/8/2020	216	976

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
NM-MW-20			
	2/18/2020	21.8	372
	4/9/2020	21.0	408
	7/10/2020	22.2	377
	10/8/2020	23.0	402
NM-MW-21			
	2/18/2020	31.5	533
	4/9/2020	28.3	560
	7/10/2020	28.8	524
	10/8/2020	29.8	523
Non-Remedial Wells			
DHU-FWS			
	01/06	564	3,082
	03/06	581	3,181
	6/14/2006	553	3,020
	9/12/2006	584	2,650
	12/6/2006	636	3,070
	7/30/2007	646	3,010
	1/21/2008	637	3,140
	7/7/2008	546	3,050
	1/26/2009	610	3,040
	8/21/2009	580	3,000
	2/17/2010	NS	3,000
	2/18/2010	401	NS
	8/16/2010	771	3,060
	2/10/2011	577	2,840
	8/2/2011	612	2,960
	1/31/2012	866	2,910
	7/19/2016	629	2,810
	1/11/2017	670	3,060
	4/10/2017	NS	NS
	7/14/2017	587	3,020
	10/9/2017	565	2,990
	1/12/2018	615	2,820
	4/5/2018	572	2,640
	7/5/2018	593	2,710
	10/3/2018	593	2,830
	1/7/2019	611	2,900
	4/5/2019	658	3,120
	7/15/2019	624	3,020
	10/16/2019	603	2,950
	1/22/2020	NS	NS
	4/13/2020	570	2,940
	7/14/2020	628	3,120
	10/12/2020	650	3,240

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
DHU-Office			
	04/06	376	2,434
DHU- Office (CHRM)			
	04/06	382	2,460
Livermore			
	01/06	NS	NS
	03/06	6,946	11,381
	6/14/2006	8,320	14,300
	9/12/2006	7,400	12,000
	12/7/2006	5,750	12,000
	2/28/2007	5,770	11,200
	7/30/2007	5,910	12,600
	7/7/2008	5,280	9,340
	1/29/2009	4,670	8,200
	8/25/2009	4,630	8,260
	2/18/2010	3,700	7,560
	8/20/2010	4,390	7,920
	2/15/2011	4,400	7,430
	8/5/2011	4,230	7,230
	2/3/2012	3,310	6,790
	8/7/2012	3,730	NS
	1/30/2013	3,810	6,080
	7/31/2013	3,630	6,240
	1/15/2014	3,450	5,580
	7/16/2014	3,190	6,830
	1/14/2015	3,200	6,490
	7/17/2015	5,380	11,500
	1/29/2016	3,110	4,530
	7/21/2016	3,040	5,710
	1/11/2017	2,940	4,970
	4/10/2017	NS	NS
	7/19/2017	2,870	4,800
	10/9/2017	2,700	4,200
	1/12/2018	2,700	4,830
	4/6/2018	2,530	1,430
	7/3/2018	2,560	4,580
	10/4/2018	2,710	4,020
	1/8/2019	2,530	4,330
	4/10/2019	2,660	4,670
	7/16/2019	1,340	4,720
	10/17/2019	2,490	4,160
	1/22/2020	2,700	4,560
	4/13/2020	1,880	4,300
	7/15/2020	2,440	5,200
	10/12/2020	2,450	4,430
Pure Water Tower			
	01/06	6,976	12,456
	03/06	NS	NS
	6/14/2006	7,890	16,200
	9/12/2006	8,200	13,100
	12/6/2006	8,070	14,600
	2/27/2007	6,400	12,800
	7/30/2007	7,450	15,400
	1/21/2008	11,800	20,100
	1/26/2009	5,010	12,100
	8/21/2009	6,920	12,900
	2/17/2010	NS	19,800
	2/18/2010	9,880	NS
	8/16/2010	11,800	23,000
	6/28/2011	9,260	20,500
	8/5/2011	6,470	12,900
	1/31/2012	5,380	11,500
	7/14/2020	NS	NS
	10/12/2020	NS	NS

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
Pure Water Well			
	01/06	NS	NS
	03/06	NS	NS
	6/14/2006	5,820	11,200
	9/12/2006	6,260	13,900
	12/6/2006	2,790	5,680
	7/23/2007	4,060	9,500
	1/21/2008	2,560	4,590
	7/7/2008	1,030	2,320
	1/26/2009	4,390	10,400
	8/21/2009	5,240	9,840
	2/17/2010	NS	9,160
	2/18/2010	1,810	NS
	2/10/2011	5,070	12,900
	8/5/2011	5,430	12,900
	8/21/2012	4,650	10,200
	1/30/2013	4,880	8,800
	10/25/2013	5,340	11,100
	1/13/2014	4,830	10,700
	7/17/2015	754	1,890
	7/14/2020	NS	NS
	10/12/2020	NS	NS
RRR Ranch Windmill			
	01/06	NS	NS
	03/06	1,693	3,527
	6/14/2006	1,760	3,640
	1/28/2016	1,430	2,760
	7/22/2016	1,460	3,940
	1/12/2017	1,760	3,030
	4/10/2017	NS	NS
	7/17/2017	1,570	3,300
	10/9/2017	2,620	3,870
	1/12/2018	650	1,500
	4/5/2018	1,620	3,110
	7/6/2018	1,670	3,030
	10/3/2018	1,660	3,000
	1/7/2019	1,290	2,950
	4/4/2019	47.4	3,110
	7/11/2019	1,800	3,560
	10/15/2019	1,800	3,500
	1/23/2020	1,850	3,520
	4/9/2020	1,860	3,460
	7/14/2020	1,930	4,490
	10/7/2020	1,960	4,110

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
TRAC-4			
	01/06	432	1,237
	03/06	581	3,181
	6/14/2006	402	1,270
	9/11/2006	428	1,310
	12/7/2006	456	1,300
	2/27/2007	435	1,240
	7/30/2007	493	1,320
	1/21/2008	421	1,220
	7/7/2008	461	1,290
	1/26/2009	546	1,320
	8/21/2009	471	1,330
	2/17/2010	NS	1,320
	2/18/2010	469	NS
	2/15/2011	549	1,340
	8/4/2011	455	1,250
	1/31/2012	445	1,150
	8/2/2012	433	NS
	7/31/2013	427	1,170
	7/18/2014	470	1,480
	7/17/2015	425	1,210
	1/28/2016	400	1,280
	7/19/2016	NS	NS
	1/11/2017	377	1,160
	4/10/2017	NS	NS
	7/19/2017	350	1,100
	10/9/2017	348	1,110
	1/12/2018	335	1,120
	4/6/2018	401	1,040
	7/3/2018	343	1,040
	10/4/2018	347	1,070
	1/7/2019	315	1,080
	4/9/2019	350	1,070
	7/16/2019	333	1,110
	10/17/2019	323	1,070
	1/22/2020	NS	NS
	4/10/2020	NS	NS
	7/14/2020	NS	NS
	10/12/2020	NS	NS
TRAC-8			
	01/06	2,090	3,786
	03/06	2,090	3,801
	6/14/2006	1,740	3,830
	9/11/2006	1,990	4,630
	12/6/2006	2,130	4,600
	2/27/2007	2,220	4,630
	7/30/2007	2,220	5,110
	1/21/2008	2,100	3,580
	7/7/2008	2,010	4,170
	1/26/2009	2,250	4,280
	8/21/2009	2,260	4,140
	3/8/2010	2,240	4,430
	8/16/2010	2,360	4,350
	2/10/2011	2,880	4,750
	8/4/2011	2,450	5,170
	1/31/2012	2,120	4,600
	8/2/2012	1,600	NS
	1/30/2013	1,920	3,420
	7/31/2013	1,760	4,060
	1/13/2014	1,650	3,270
	7/17/2014	1,770	4,670
	1/13/2015	1,810	4,300
	1/28/2016	NS	NS
	7/19/2016	2,000	4,380
	7/14/2020	NS	NS
	10/12/2020	NS	NS

Appendix C
Historical Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Dollarhide, Texas

Sample Location	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)
TCEQ Secondary Drinking Water Standards (mg/L)		300	1,000
Wilson Ranch			
	01/06	2,243	3,578
	03/06	NS	NS
	6/14/2006	2,410	4,980
	9/12/2006	2,510	4,450
	12/7/2006	2,350	4,750
	2/27/2007	2,110	4,020
	7/30/2007	2,440	5,240
	1/21/2008	2,690	3,880
	7/7/2008	2,030	3,810
	8/25/2009	2,320	5,350
	2/12/2016	888	2,230
	7/19/2016	1,500	3,250
	1/10/2017	1,300	3,130
	4/10/2017	NS	NS
	7/16/2017	1,140	2,380
	10/9/2017	1,200	2,800
	1/12/2018	673	1,600
	4/6/2018	1,360	2,950
	7/6/2018	1,330	2,190
	10/3/2018	1,380	2,680
	1/7/2019	1,070	2,420
	4/4/2019	1,480	2,440
	7/12/2019	1,300	2,530
	10/15/2019	928	1,880
	1/22/2020	1,330	2,790
	4/10/2020	1,260	2,530
	7/10/2020	1,030	1,990
	10/8/2020	784	1,710
Smith Residential Well			
	1/13/2017	1,600	2,580
	4/10/2017	NS	NS
	7/17/2017	1,050	2,230
	10/9/2017	1,260	2,660
	1/12/2018	650	1,500
	4/5/2018	1,280	2,670
	7/6/2018	1,340	2,140
	10/3/2018	1,310	2,260
	1/7/2019	1,020	2,230
	4/5/2019	1,510	2,490
	7/12/2019	1,300	2,660
	10/15/2019	1,180	2,140
	1/22/2020	1,360	2,550
	4/10/2020	1,310	2,600
	7/10/2020	1,310	2,570
	10/8/2020	753	1,570

Notes:

1. Constituent concentrations are reported in milligrams per liter (mg/L).
 2. Bold font and shading indicates that a detected result exceeded the TCEQ Secondary Drinking Water Standard.
- NS = Not Sampled
NS = Not Applicable

Appendix D

Data Validation Reports



Memorandum

August 11, 2020

To: Nick Casten, Liz Whiddon

Ref. No.: 055270

From:  Chris G. Knight/eew/31-NF

Tel: 512-506-8803

Subject: **Analytical Results and Reduced Validation
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020**

1. Introduction

The following document details a reduced validation of analytical results for groundwater samples collected at the Chevron Environmental Management Company (CEMC) – Dollarhide site during July 2020. Samples were submitted to Xenco Laboratories, located in Midland, Texas. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody form, finished report forms, method blank data, duplicate data, recovery data from laboratory control sample/laboratory control duplicate samples (LCS/LCSD), matrix spikes/matrix spike duplicates (MS/MSD), laboratory duplicates, and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the document entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review", EPA 540-R-2016-001, September 2016.

Item i) will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. The sample chain of custody document and the analytical reports were used to determine sample holding times. All samples were analyzed within the required holding times.

All samples were delivered on ice and stored by the laboratory at the required temperature (0-6°C).



3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per twenty investigative samples and/or one per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Laboratory Control Sample Analyses

LCS/LCSD are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS/LCSD were analyzed at a minimum frequency of one per twenty investigative samples and/or one per analytical batch.

The LCS/LCSD contained chloride. LCS recoveries were assessed per the "Guidelines". All LCS recoveries and RPDs were within the control limits, demonstrating acceptable analytical accuracy and precision.

5. Matrix Spike Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed for chloride analyses as specified in Table 1. The MS/MSD samples were spiked with chloride and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision with the following exception:

- i) One MS/MSD was reported with elevated recoveries due to possible matrix interferences and was not assessed. No further action was required.

The laboratory also performed additional MS/MSD analyses on non-site samples. These cannot be used to assess accuracy and precision for the site samples.



6. Duplicate Sample Analyses

Analytical precision is evaluated based on the analysis of laboratory duplicate samples. For this study, duplicate samples were prepared and analyzed by the laboratory as specified in Table 1 for total dissolved solids (TDS). The duplicate results were evaluated per the "Guidelines".

All duplicate analyses performed were acceptable, demonstrating acceptable analytical precision.

The laboratory also performed additional duplicate analyses on non-site samples. These cannot be used to assess precision for the site samples.

7. Field QA/QC Samples

The field QA/QC consisted four field duplicate sample sets.

To assess the analytical and sampling protocol precision, four field duplicate sample sets were collected and submitted to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than fifty percent for water. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criterion is one times the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's RL for each analyte.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
NM-MW-13-W-201007	NM-MW-13	Water	07/10/2020	10:00	X	X	DUP
NM-MW-11-W-201007	NM-MW-11	Water	07/10/2020	10:30	X	X	
NM-MW-11-WD-201007	NM-MW-11	Water	07/10/2020	10:45	X	X	Field duplicate of NM-MW-11
NM-MW-15-W-201007	NM-MW-15	Water	07/10/2020	11:00	X	X	MS/MSD
NM-MW-20-W-201007	NM-MW-20	Water	07/10/2020	11:45	X	X	
NM-MW-21-W-201007	NM-MW-21	Water	07/10/2020	12:15	X	X	MS/MSD
NM-MW-17-W-201007	NM-MW-17	Water	07/10/2020	12:45	X	X	
NM-MW-12-W-201007	NM-MW-12	Water	07/10/2020	13:30	X	X	
Wilson Ranch Well-W-201007	WILSON RANCH WW	Water	07/10/2020	13:45	X	X	
Smith Residence	SMITH RESIDENCE	Water	07/10/2020	14:15	X	X	
44-J-4-MW-W-201307	44-J-4	Water	07/13/2020	10:00	X	X	DUP
44-J-3-MW-W-201307	44-J-3	Water	07/13/2020	10:15	X	X	
44-J-5-MW-W-201307	44-J-5	Water	07/13/2020	10:30	X	X	
44-J-1-MW-W-201307	44-J-1	Water	07/13/2020	10:45	X	X	
44-J-2-MW-W-201307	44-J-2	Water	07/13/2020	11:00	X	X	
44-I-1-MW-W-201307	44-I-1	Water	07/13/2020	11:15	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
45-FF-MW-W-201307	45-FF	Water	07/13/2020	11:30	X	X	
45-E-2-MW-W-201307	45-E-2	Water	07/13/2020	11:45	X	X	
45-E-1-MW-W-201307	45-E-1	Water	07/13/2020	12:00	X	X	
45-F-1-MW-W-201307	45-F-1	Water	07/13/2020	12:15	X	X	
MW-20-W-201307	MW-20	Water	07/13/2020	12:30	X	X	DUP
NM-MW-10-W-201307	NM-MW-10	Water	07/13/2020	12:45	X	X	
NM-MW-9-W-201307	NM-MW-9	Water	07/13/2020	13:00	X	X	
NM-MW-14-W-201307	NM-MW-14	Water	07/13/2020	13:15	X	X	
45-E3-MW-W-201307	45-E-3	Water	07/13/2020	13:30	X	X	
43-K-1-MW-W-201307	43-K-1	Water	07/13/2020	13:45	X	X	
NM-MW-7-W-201407	NM-MW-7	Water	07/14/2020	10:00	X	X	
RRR Ranch Windmill-W-201407	Ranch Windmill	Water	07/14/2020	10:10	X	X	
NM-MW-4-W-201407	NM-MW-4	Water	07/14/2020	10:20	X	X	
NM-MW-8-W-201407	NM-MW-8	Water	07/14/2020	10:30	X	X	
NM-MW-3-W-201407	NM-MW-3	Water	07/14/2020	10:40	X	X	DUP
NM-MW-2-W-201407	NM-MW-2	Water	07/14/2020	10:50	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
NM-MW-1-W-201407	NM-MW-1	Water	07/14/2020	11:00	X	X	
NM-MW-5-W-201407	NM-MW-5	Water	07/14/2020	11:10	X	X	
NM-MW-6-W-201407	NM-MW-6	Water	07/14/2020	11:20	X	X	
58-B-3-MW-W-201407	58-B-3	Water	07/14/2020	11:30	X	X	
MW-34-W-201407	MW-34	Water	07/14/2020	11:40	X	X	
MW-33-W-201407	MW-33	Water	07/14/2020	11:50	X	X	
MW-32-W-201407	MW-32	Water	07/14/2020	12:00	X	X	MS/MSD
MW-32-WD-201407	MW-32	Water	07/14/2020	12:00	X	X	Field duplicate of MW-32
MW-29-W-201407	MW-29	Water	07/14/2020	12:30	X	X	
MW-28-W-201407	MW-28	Water	07/14/2020	12:40	X	X	
MW-8-W-201407	MW-8	Water	07/14/2020	12:50	X	X	
MW-9-W-201407	MW-9	Water	07/14/2020	13:00	X	X	
58-B-1-MW-W-201407	58-B-1	Water	07/14/2020	13:20	X	X	DUP
58-B-2-MW-W-201407	58-B-2	Water	07/14/2020	13:30	X	X	
DHU-FWS-W-201407	DHU-FWS	Water	07/14/2020	13:40	X	X	
MW-27-W-201507	MW-27	Water	07/15/2020	09:10	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
MW-10-W-201507	MW-10	Water	07/15/2020	09:20	X	X	
MW-26-W-201507	MW-26	Water	07/15/2020	09:30	X	X	
MW-24-W-201507	MW-24	Water	07/15/2020	09:40	X	X	DUP
MW-19-W-201507	MW-19	Water	07/15/2020	09:50	X	X	
MW-18-W-201507	MW-18	Water	07/15/2020	10:00	X	X	
MW-25-W-201507	MW-25	Water	07/15/2020	10:15	X	X	
MW-25-WD-201507	MW-25	Water	07/15/2020	10:15	X	X	Field duplicate of MW-25
MW-12-W-201507	MW-12	Water	07/15/2020	10:30	X	X	
MW-31-W-201507	MW-31	Water	07/15/2020	10:45	X	X	
MW-11-W-201507	MW-11	Water	07/15/2020	11:00	X	X	
MW-6-W-201507	MW-6	Water	07/15/2020	11:15	X	X	
MW-5-W-201507	MW-5	Water	07/15/2020	11:30	X	X	
MW-4-W-201507	MW-4	Water	07/15/2020	11:45	X	X	DUP
MW-3-W-201507	MW-3	Water	07/15/2020	12:00	X	X	
MW-14-W-201507	MW-14	Water	07/15/2020	12:15	X	X	
MW-13-W-201507	MW-13	Water	07/15/2020	12:30	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
MW-15-W-201507	MW-15	Water	07/15/2020	12:45	X	X	
MW-16-W-201507	MW-16	Water	07/15/2020	13:00	X	X	
MW-21-W-201507	MW-21	Water	07/15/2020	13:15	X	X	
MW-17-W-201507	MW-17	Water	07/15/2020	13:30	X	X	
MW-23-W-201507	MW-23	Water	07/15/2020	13:45	X	X	
MW-22-W-201507	MW-22	Water	07/15/2020	14:00	X	X	
MW-22-WD-201507	MW-22	Water	07/15/2020	14:00	X	X	Field duplicate of MW-22; DUP
MW-30-W-201507	MW-30	Water	07/15/2020	14:15	X	X	
Livermore-W-201507	Livermore	Water	07/15/2020	14:30	X	X	

Notes:

TDS - Total Dissolved Solids
MS/MSD - Matrix Spike/Matrix Spike Duplicate
DUP - Laboratory Duplicate

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		43-K-1	44-I-1	44-J-1	44-J-2	44-J-3	44-J-4
Sample Name:		43-K-1-MW-W-201307	44-I-1-MW-W-201307	44-J-1-MW-W-201307	44-J-2-MW-W-201307	44-J-3-MW-W-201307	44-J-4-MW-W-201307
Sample Date:		07/13/2020	07/13/2020	07/13/2020	07/13/2020	07/13/2020	07/13/2020
Parameters		Unit					
General Chemistry							
Chloride	mg/L	7440	3660	4770	5120	4920	4450
TDS	mg/L	10700	5840	7880	8210	8080	8020

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		44-J-5	45-E-1	45-E-2	45-E-3	45-F-1	45-FF
Sample Name:		44-J-5-MW-W-201307	45-E-1-MW-W-201307	45-E-2-MW-W-201307	45-E3-MW-W-201307	45-F-1-MW-W-201307	45-FF-MW-W-201307
Sample Date:		07/13/2020	07/13/2020	07/13/2020	07/13/2020	07/13/2020	07/13/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	4190	3100	1750	5690	1130	4120
TDS	mg/L	6690	5540	3150	8480	1960	6850

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		58-B-1	58-B-2	58-B-3	DHU-FWS	Livermore	MW-3
Sample Name:		58-B-1-MW-W-201407	58-B-2-MW-W-201407	58-B-3-MW-W-201407	DHU-FWS-W-201407	Livermore-W-201507	MW-3-W-201507
Sample Date:		07/14/2020	07/14/2020	07/14/2020	07/14/2020	07/15/2020	07/15/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	7160	4040	1640	628	2440	648
TDS	mg/L	11400	7190	3160	3120	5200	1550

Table 2

**Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020**

Location ID:		MW-4	MW-5	MW-6	MW-8	MW-9	MW-10
Sample Name:		MW-4-W-201507	MW-5-W-201507	MW-6-W-201507	MW-8-W-201407	MW-9-W-201407	MW-10-W-201507
Sample Date:		07/15/2020	07/15/2020	07/15/2020	07/14/2020	07/14/2020	07/15/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	352	267	417	1010	2700	5130
TDS	mg/L	1050	1090	1590	2460	5070	9450

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		MW-11	MW-12	MW-13	MW-14	MW-15	MW-16
Sample Name:		MW-11-W-201507	MW-12-W-201507	MW-13-W-201507	MW-14-W-201507	MW-15-W-201507	MW-16-W-201507
Sample Date:		07/15/2020	07/15/2020	07/15/2020	07/15/2020	07/15/2020	07/15/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	6240	12700	1750	1760	1110	505
TDS	mg/L	12000	22700	4350	3640	2330	1390

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		MW-17	MW-18	MW-19	MW-20	MW-21	MW-22
Sample Name:		MW-17-W-201507	MW-18-W-201507	MW-19-W-201507	MW-20-W-201307	MW-21-W-201507	MW-22-W-201507
Sample Date:		07/15/2020	07/15/2020	07/15/2020	07/13/2020	07/15/2020	07/15/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	7450	21400	7880	1320	5850	10100
TDS	mg/L	15000	36000	13700	2450	10700	21900

Table 2

**Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020**

Location ID:		MW-22	MW-23	MW-24	MW-25	MW-25	MW-26
Sample Name:		MW-22-WD-201507	MW-23-W-201507	MW-24-W-201507	MW-25-W-201507	MW-25-WD-201507	MW-26-W-201507
Sample Date:		07/15/2020 Duplicate	07/15/2020	07/15/2020	07/15/2020	07/15/2020 Duplicate	07/15/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	9130	6060	4430	26100	24000	1480
TDS	mg/L	21900	12600	9130	37300	36600	3520

Table 2

**Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020**

Location ID:		MW-27	MW-28	MW-29	MW-30	MW-31	MW-32
Sample Name:		MW-27-W-201507	MW-28-W-201407	MW-29-W-201407	MW-30-W-201507	MW-31-W-201507	MW-32-W-201407
Sample Date:		07/15/2020	07/14/2020	07/14/2020	07/15/2020	07/15/2020	07/14/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	2950	3370	563	2290	8890	321
TDS	mg/L	5120	6510	1460	4530	17800	1140

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		MW-32	MW-33	MW-34	NM-MW-1	NM-MW-2	NM-MW-3
Sample Name:		MW-32-WD-201407	MW-33-W-201407	MW-34-W-201407	NM-MW-1-W-201407	NM-MW-2-W-201407	NM-MW-3-W-201407
Sample Date:		07/14/2020	07/14/2020	07/14/2020	07/14/2020	07/14/2020	07/14/2020
		Duplicate					
Parameters	Unit						
General Chemistry							
Chloride	mg/L	302	196	71.3	293	696	261
TDS	mg/L	1020	1060	613	1450	1530	811

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		NM-MW-4	NM-MW-5	NM-MW-6	NM-MW-7	NM-MW-8	NM-MW-9
Sample Name:		NM-MW-4-W-201407	NM-MW-5-W-201407	NM-MW-6-W-201407	NM-MW-7-W-201407	NM-MW-8-W-201407	NM-MW-9-W-201307
Sample Date:		07/14/2020	07/14/2020	07/14/2020	07/14/2020	07/14/2020	07/13/2020
Parameters	Unit						
General Chemistry							
Chloride	mg/L	46.9	162	152	2360	6540	271
TDS	mg/L	419	1250	828	5250	12400	852

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		NM-MW-10	NM-MW-11	NM-MW-11	NM-MW-12	NM-MW-13	NM-MW-14
Sample Name:		NM-MW-10-W-201307	NM-MW-11-W-201007	NM-MW-11-WD-201007	NM-MW-12-W-201007	NM-MW-13-W-201007	NM-MW-14-W-201307
Sample Date:		07/13/2020	07/10/2020	07/10/2020	07/10/2020	07/10/2020	07/13/2020
				Duplicate			
Parameters	Unit						
General Chemistry							
Chloride	mg/L	366	178	188	589	212	25.0
TDS	mg/L	1650	2120	1920	1270	1130	488

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Location ID:		NM-MW-15	NM-MW-17	NM-MW-20	NM-MW-21
Sample Name:		NM-MW-15-W-201007	NM-MW-17-W-201007	NM-MW-20-W-201007	NM-MW-21-W-201007
Sample Date:		07/10/2020	07/10/2020	07/10/2020	07/10/2020
Parameters	Unit				
General Chemistry					
Chloride	mg/L	57.3	211	22.2	28.8
TDS	mg/L	509	978	377	524

Table 2

**Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020**

Location ID:		Ranch Windmill	SMITH RESIDENCE	WILSON RANCH WW
Sample Name:		RRR Ranch Windmill-W-201407	Smith Residence	Wilson Ranch Well-W-201007
Sample Date:		07/14/2020	07/10/2020	07/10/2020
Parameters	Unit			
General Chemistry				
Chloride	mg/L	1930	1310	1030
TDS	mg/L	4490	2570	1990

Notes:

TDS - Total Dissolved Solids

Table 3

Analytical Methods
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
July 2020

Parameter	Method	Matrix	Holding Time
			Collection to Analysis (Days)
Chloride	EPA 300/300.1	Water	28
TDS	SM 2540C	Water	7

Notes:

TDS - Total Dissolved Solids

Method References:

EPA - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

SM - "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, with subsequent revisions



Memorandum

November 6, 2020

To: Nick Casten, Liz Whiddon

Ref. No.: 055270

From: ^{CK}Chris G. Knight/eew/32-NF

Tel: 512-506-8803

**Subject: Analytical Results and Reduced Validation
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020**

1. Introduction

The following document details a reduced validation of analytical results for groundwater samples collected at the Chevron Environmental Management Company (CEMC) – Dollarhide site during October 2020. Samples were submitted to Xenco Laboratories, located in Midland, Texas. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody form, finished report forms, method blank data, duplicate data, recovery data from laboratory control sample/laboratory control duplicate samples (LCS/LCSD), matrix spikes/matrix spike duplicates (MS/MSD), laboratory duplicates, and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the document entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review", EPA 540-R-2016-001, September 2016.

Item i) will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. The sample chain of custody document and the analytical reports were used to determine sample holding times. All samples were analyzed within the required holding times.

All samples were delivered on ice and stored by the laboratory at the required temperature (0-6°C).



3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per twenty investigative samples and/or one per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Laboratory Control Sample Analyses

LCS/LCSD are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS/LCSD were analyzed at a minimum frequency of one per twenty investigative samples and/or one per analytical batch.

The LCS/LCSD contained chloride. LCS recoveries were assessed per the "Guidelines". All LCS recoveries and RPDs were within the control limits, demonstrating acceptable analytical accuracy and precision.

5. Matrix Spike Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed for chloride analyses as specified in Table 1. The MS/MSD samples were spiked with chloride and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision with the following exception:

- i) One MS/MSD was reported with an elevated MS recovery. If only the MS or MSD recovery was outside of control limits, no qualification of the data was performed based on the acceptable recovery of the companion spike and the acceptable RPD. No further action was required.
- ii) One MS/MSD was reported with elevated recoveries due to possible matrix interferences and was not assessed. No further action was required.

The laboratory also performed additional MS/MSD analyses on non-site samples. These cannot be used to assess accuracy and precision for the site samples.



6. Duplicate Sample Analyses

Analytical precision is evaluated based on the analysis of laboratory duplicate samples. For this study, duplicate samples were prepared and analyzed by the laboratory as specified in Table 1 for total dissolved solids (TDS). The duplicate results were evaluated per the "Guidelines".

All duplicate analyses performed were acceptable, demonstrating acceptable analytical precision.

The laboratory also performed additional duplicate analyses on non-site samples. These cannot be used to assess precision for the site samples.

7. Field QA/QC Samples

The field QA/QC consisted four field duplicate sample sets.

To assess the analytical and sampling protocol precision, four field duplicate sample sets were collected and submitted to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than fifty percent for water. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criterion is one times the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's RL for each analyte.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
NM-MW-6-W-200710	NM-MW-6	Water	10/07/2020	12:00	X	X	DUP
NM-MW-5-W-200710	NM-MW-5	Water	10/07/2020	12:30	X	X	
NM-MW-1-W-200710	NM-MW-1	Water	10/07/2020	13:00	X	X	
NM-MW-2-W-200710	NM-MW-2	Water	10/07/2020	13:30	X	X	
NM-MW-3-W-200710	NM-MW-3	Water	10/07/2020	14:00	X	X	
NM-MW-7-W-200710	NM-MW-7	Water	10/07/2020	14:30	X	X	
RRR Ranch Windmill-W-200820	Ranch Windmill	Water	10/07/2020	15:00	X	X	
NM-MW-4-W-200820	NM-MW-4	Water	10/07/2020	15:30	X	X	
NM-MW-8-W-200820	NM-MW-8	Water	10/07/2020	16:00	X	X	
NM-MW-9-W-200820	NM-MW-9	Water	10/08/2020	10:15	X	X	
NM-MW-14-W-200820	NM-MW-14	Water	10/08/2020	10:45	X	X	DUP
NM-MW-15-200810	NM-MW-15	Water	10/08/2020	11:15	X	X	MS/MSD
NM-MW-11-200810	NM-MW-11	Water	10/08/2020	11:45	X	X	DUP
NM-MW-13-200810	NM-MW-13	Water	10/08/2020	12:15	X	X	
NM-MW-17-200810	NM-MW-17	Water	10/08/2020	12:45	X	X	
Wilson Ranch Well-W-200820	WILSON RANCH WW	Water	10/08/2020	13:15	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
NM-MW-12-200810	NM-MW-12	Water	10/08/2020	13:45	X	X	
Smith Residence-W-200820	SMITH RESIDENCE	Water	10/08/2020	14:15	X	X	
NM-MW-10-W-200820	NM-MW-10	Water	10/08/2020	14:45	X	X	
MW-32-200810	MW-32	Water	10/08/2020	15:15	X	X	
MW-32-WD-200810	MW-32	Water	10/08/2020	15:15	X	X	Field duplicate of MW-32
MW-33-200810	MW-33	Water	10/08/2020	15:45	X	X	MS/MSD
MW-34-200810	MW-34	Water	10/08/2020	16:15	X	X	
NM-MW-20-200810	NM-MW-20	Water	10/08/2020	16:45	X	X	
NM-MW-21-200810	NM-MW-21	Water	10/08/2020	17:15	X	X	
NM-MW-21-WD-200810	NM-MW-21	Water	10/08/2020	17:15	X	X	Field duplicate of NM-MW-21
MW-28-W-200810	MW-28	Water	10/08/2020	17:45	X	X	
MW-29-W-200810	MW-29	Water	10/08/2020	18:15	X	X	
MW-15-W-201210	MW-15	Water	10/12/2020	10:15	X	X	DUP
MW-16-W-201210	MW-16	Water	10/12/2020	10:30	X	X	MS/MSD
MW-14-W-201210	MW-14	Water	10/12/2020	10:45	X	X	
MW-4-W-201210	MW-4	Water	10/12/2020	11:00	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
MW-3-W-201210	MW-3	Water	10/12/2020	11:15	X	X	
MW-13-W-201210	MW-13	Water	10/12/2020	11:30	X	X	
MW-21-W-201210	MW-21	Water	10/12/2020	11:45	X	X	
MW-17-W-201210	MW-17	Water	10/12/2020	12:15	X	X	
MW-17-WD-201210	MW-17	Water	10/12/2020	12:15	X	X	Field duplicate of MW-17
MW-22-W-201210	MW-22	Water	10/12/2020	12:30	X	X	
MW-23-W-201210	MW-23	Water	10/12/2020	12:45	X	X	DUP
MW-30-W-201210	MW-30	Water	10/12/2020	13:00	X	X	
Livermore-W-201210	Livermore	Water	10/12/2020	13:15	X	X	
MW-5-W-201210	MW-5	Water	10/12/2020	13:30	X	X	MS/MSD
MW-8-W-201210	MW-8	Water	10/12/2020	13:45	X	X	
MW-9-W-201210	MW-9	Water	10/12/2020	14:00	X	X	
DHU-FWS-W-201210	DHU-FWS	Water	10/12/2020	14:15	X	X	
MW-27-W-201210	MW-27	Water	10/12/2020	14:30	X	X	
MW-20-W-201210	MW-20	Water	10/12/2020	14:45	X	X	
MW-10-W-201210	MW-10	Water	10/12/2020	15:15	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
MW-10-WD-201210	MW-10	Water	10/12/2020	15:15	X	X	Field duplicate of MW-10; DUP
MW-26-W-201210	MW-26	Water	10/12/2020	15:30	X	X	
MW-24-W-201210	MW-24	Water	10/12/2020	15:45	X	X	
MW-19-W-201210	MW-19	Water	10/12/2020	16:00	X	X	
MW-18-W-201210	MW-18	Water	10/12/2020	16:15	X	X	
MW-25-W-201210	MW-25	Water	10/12/2020	16:30	X	X	
MW-12-W-201210	MW-12	Water	10/12/2020	16:45	X	X	
MW-31-W-201210	MW-31	Water	10/12/2020	17:00	X	X	
MW-11-W-201210	MW-11	Water	10/12/2020	17:15	X	X	MS/MSD
MW-6-W-201210	MW-6	Water	10/12/2020	17:30	X	X	

Notes:

TDS - Total Dissolved Solids

MS/MSD - Matrix Spike/Matrix Spike Duplicate

DUP - Laboratory Duplicate

Table 2

Analytical Results Summary

Groundwater Monitoring Well Sampling

Chevron Environmental Management Company (CEMC) - Dollarhide

Andrews County, Texas

October 2020

Location ID:		DHU-FWS	Livermore	MW-3	MW-4	MW-5	MW-6	MW-8	MW-9	MW-10
Sample Name:		DHU-FWS-W-201210	Livermore-W-201210	MW-3-W-201210	MW-4-W-201210	MW-5-W-201210	MW-6-W-201210	MW-8-W-201210	MW-9-W-201210	MW-10-W-201210
Sample Date:		10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020
Parameters		Unit								
General Chemistry										
Chloride	mg/L	650	2450	671	343	267	423	1040	2710	5270
TDS	mg/L	3240	4430	1380	903	974	1440	2480	4270	8250

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:		MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-17
Sample Name:		MW-10-WD-201210	MW-11-W-201210	MW-12-W-201210	MW-13-W-201210	MW-14-W-201210	MW-15-W-201210	MW-16-W-201210	MW-17-W-201210	MW-17-WD-201210
Sample Date:		10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020
		Duplicate								Duplicate
Parameters	Unit									
General Chemistry										
Chloride	mg/L	4990	68.2	13600	1820	1810	1110	411	8280	8680
TDS	mg/L	8340	11800	24700	4140	3270	2010	1060	13500	14900

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:		MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	MW-24	MW-25	MW-26
Sample Name:		MW-18-W-201210	MW-19-W-201210	MW-20-W-201210	MW-21-W-201210	MW-22-W-201210	MW-23-W-201210	MW-24-W-201210	MW-25-W-201210	MW-26-W-201210
Sample Date:		10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020	10/12/2020
Parameters		Unit								
General Chemistry										
Chloride	mg/L	21600	7990	1350	6840	13000	5450	4330	24100	1500
TDS	mg/L	34100	16800	2470	10900	19900	8810	9440	36900	3320

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:		MW-27	MW-28	MW-29	MW-30	MW-31	MW-32	MW-32	MW-33	MW-34
Sample Name:		MW-27-W-201210	MW-28-W-200810	MW-29-W-200810	MW-30-W-201210	MW-31-W-201210	MW-32-200810	MW-32-WD-200810	MW-33-200810	MW-34-200810
Sample Date:		10/12/2020	10/08/2020	10/08/2020	10/12/2020	10/12/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020
								Duplicate		
Parameters	Unit									
General Chemistry										
Chloride	mg/L	2490	3780	637	2240	10200	349	327	201	73.3
TDS	mg/L	4200	8160	1460	4090	16700	1110	1120	1090	608

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:	NM-MW-1	NM-MW-2	NM-MW-3	NM-MW-4	NM-MW-5	NM-MW-6	NM-MW-7
Sample Name:	NM-MW-1-W-200710	NM-MW-2-W-200710	NM-MW-3-W-200710	NM-MW-4-W-200820	NM-MW-5-W-200710	NM-MW-6-W-200710	NM-MW-7-W-200710
Sample Date:	10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020

Parameters	Unit							
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General Chemistry

Chloride	mg/L	288	706	253	47.7	155	147	2270
TDS	mg/L	1450	1370	731	431	1330	826	4860

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:		NM-MW-8	NM-MW-9	NM-MW-10	NM-MW-11	NM-MW-12	NM-MW-13	NM-MW-14
Sample Name:		NM-MW-8-W-200820	NM-MW-9-W-200820	NM-MW-10-W-200820	NM-MW-11-200810	NM-MW-12-200810	NM-MW-13-200810	NM-MW-14-W-200820
Sample Date:		10/07/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020
Parameters	Unit							
General Chemistry								
Chloride	mg/L	6370	256	366	181	580	211	26.4
TDS	mg/L	11100	811	1720	1960	1280	1100	465

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:		NM-MW-15	NM-MW-17	NM-MW-20	NM-MW-21
Sample Name:		NM-MW-15-200810	NM-MW-17-200810	NM-MW-20-200810	NM-MW-21-200810
Sample Date:		10/08/2020	10/08/2020	10/08/2020	10/08/2020
Parameters	Unit				
General Chemistry					
Chloride	mg/L	59.9	216	23.0	29.8
TDS	mg/L	521	976	402	523

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Location ID:		NM-MW-21	Ranch Windmill	SMITH RESIDENCE	WILSON RANCH WW
Sample Name:		NM-MW-21-WD-200810	RRR Ranch Windmill-W-200820	Smith Residence-W-200820	Wilson Ranch Well-W-200820
Sample Date:		10/08/2020	10/07/2020	10/08/2020	10/08/2020
		Duplicate			
Parameters	Unit				
General Chemistry					
Chloride	mg/L	29.6	1960	753	784
TDS	mg/L	534	4110	1570	1710

Notes:

TDS - Total Dissolved Solids

Table 3

Analytical Methods
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
October 2020

Parameter	Method	Matrix	Holding Time
			Collection to Analysis (Days)
Chloride	EPA 300/300.1	Water	28
TDS	SM 2540C	Water	7

Notes:

TDS - Total Dissolved Solids

Method References:

EPA - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846,
Third Edition, 1986, with subsequent revisions

SM - "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992,
with subsequent revisions



about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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CONDITIONS

Action 22745

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 22745
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 133587 for most updated status.	10/25/2022