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August 16, 2021

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 (January to June 2021)
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 (January to June 2021)* 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.

Jason Michelson

Jason Michelson

Encl.

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

APPROVED

By Nelson Velez at 8:37 am, Dec 29, 2021

Review of Semi-Annual Groundwater Monitoring Report (January to June 2021)

Report: Content satisfactory

1. Follow recommendations stated within First Half 2021 Groundwater Monitoring Summary Report.
 - a. Continue conducting quarterly monitoring of the monitor wells installed in 2019 and 2020
 - b. Continue collecting all viable wells in the groundwater monitoring system semi-annually



Semi-Annual Groundwater Monitoring Report (January to June 2021)

**Dollarhide Oil Field Unit
Andrews County, Texas
RRC OCP No. 08-1048
OCD RP No. 1R-3944**

**Chevron Environmental Management and Real Estate
Company**

August 16, 2021

→ The Power of Commitment

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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 (January to June 2021)* 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 first half of 2021.

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).

2.1.1 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.

2.1.2 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. Prior to 2021, during the voluntary April and October events, only the wells installed during the 2015, 2016, 2017, 2019, and 2020 groundwater investigations were sampled to develop concentration trends over time. In 2021, the voluntary events were reduced to include analytical sampling of only the wells installed in 2019 and 2020. The groundwater data collected during the January and April 2021 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 January and April 2021 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.

During the April 2021 voluntary sampling event, depth-to-groundwater measurements were collected at a limited number of wells in New Mexico and south of State Highway 128 in Texas to develop the groundwater potentiometric contours shown on Figure 4. These limited wells included: MW-8, MW-9, MW-28, MW-29, MW-32, MW-33, MW-43, NM-MW-1, NM-MW-2, NM-MW-3, NM-MW-4, NM-MW-5, NM-MW-6, NM-MW-7, NM-MW-8, NM-MW-9, NM-MW-10, NM-MW-11, NM-MW-12, NM-MW-13, NM-MW-14, NM-MW-15, NM-MW-17, NM-MW-20, and NM-MW-21.

5.2 Groundwater Sampling

During the January and April 2021 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 January and April 2021 sampling events are reported herein.

During the April 2021 voluntary sampling event, only the wells installed in 2019 and 2020 were sampled to develop concentration trends over time (i.e., MW-32, MW-33, MW-34, NM-MW-14, NM-MW-15, NM-MW-17, NM-MW-20, and NM-MW-21). Although NM-MW-16 was also installed in 2020, it was not sampled during the April 2021 sampling event because it was dry at the time of the event.

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 January and April 2021 events are listed in

Table 4. The groundwater chloride and TDS concentrations and isopleths for the January and April 2021 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 January and April 2021 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 January and April 2021 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.

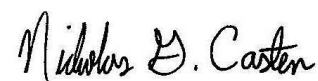
6. Conclusions and Path Forward

The results of the 2021 groundwater monitoring events will be used to continue development for the strategy and path forward for the Site. CEMREC will continue conducting quarterly monitoring of the monitor wells installed in 2019 and 2020 to establish concentration trends over time. All viable wells in the groundwater monitoring system will continue to be sampled semi-annually.

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

All of which is Respectfully Submitted

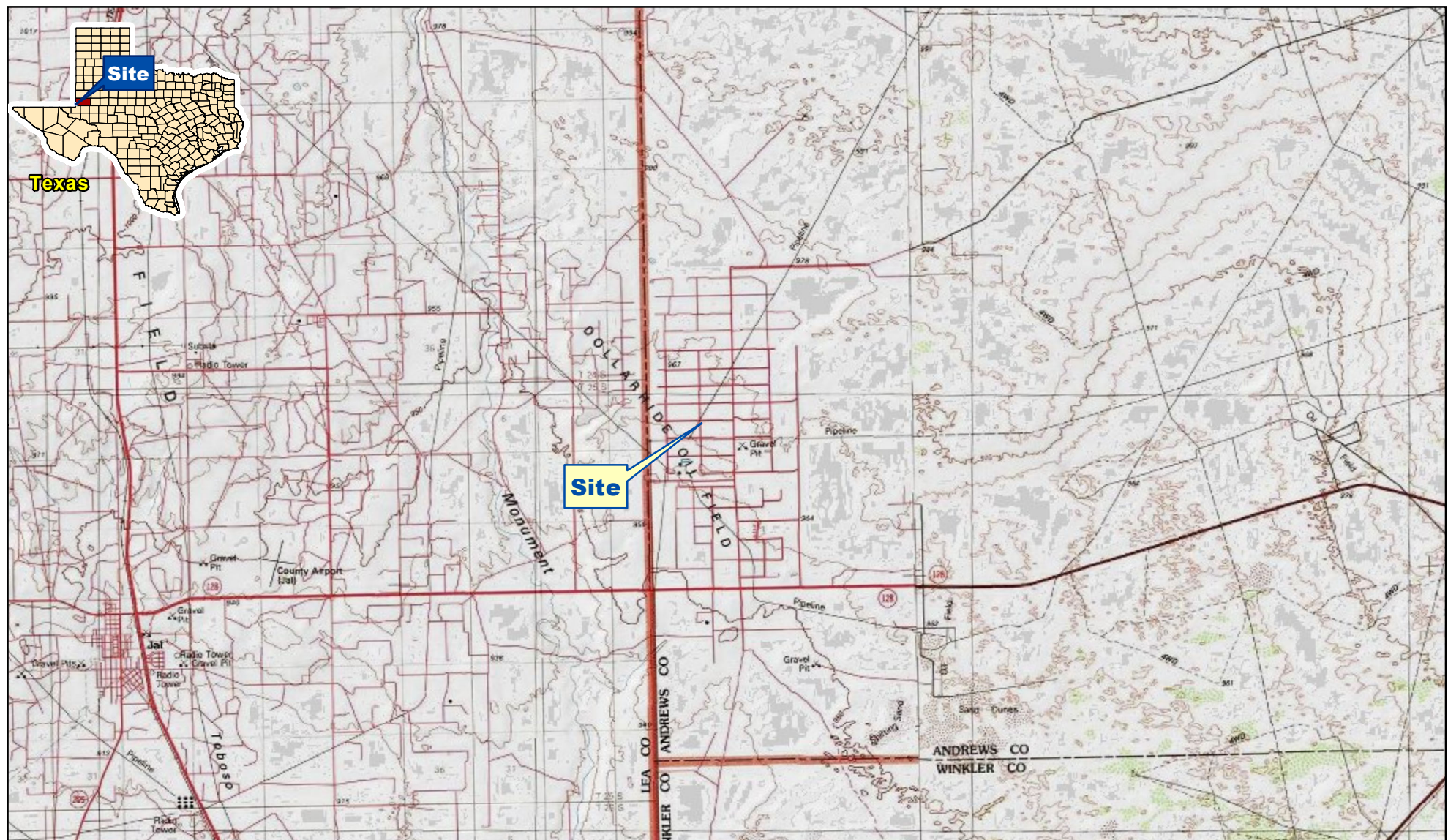
GHD



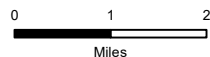
Nicholas G. Casten



Brian L. Carter, PhD
Texas PG No. 10319



Source: USGS 7.5 Minute Topographic Maps.



Coordinate System:
NAD 1983 UTM Zone 13N

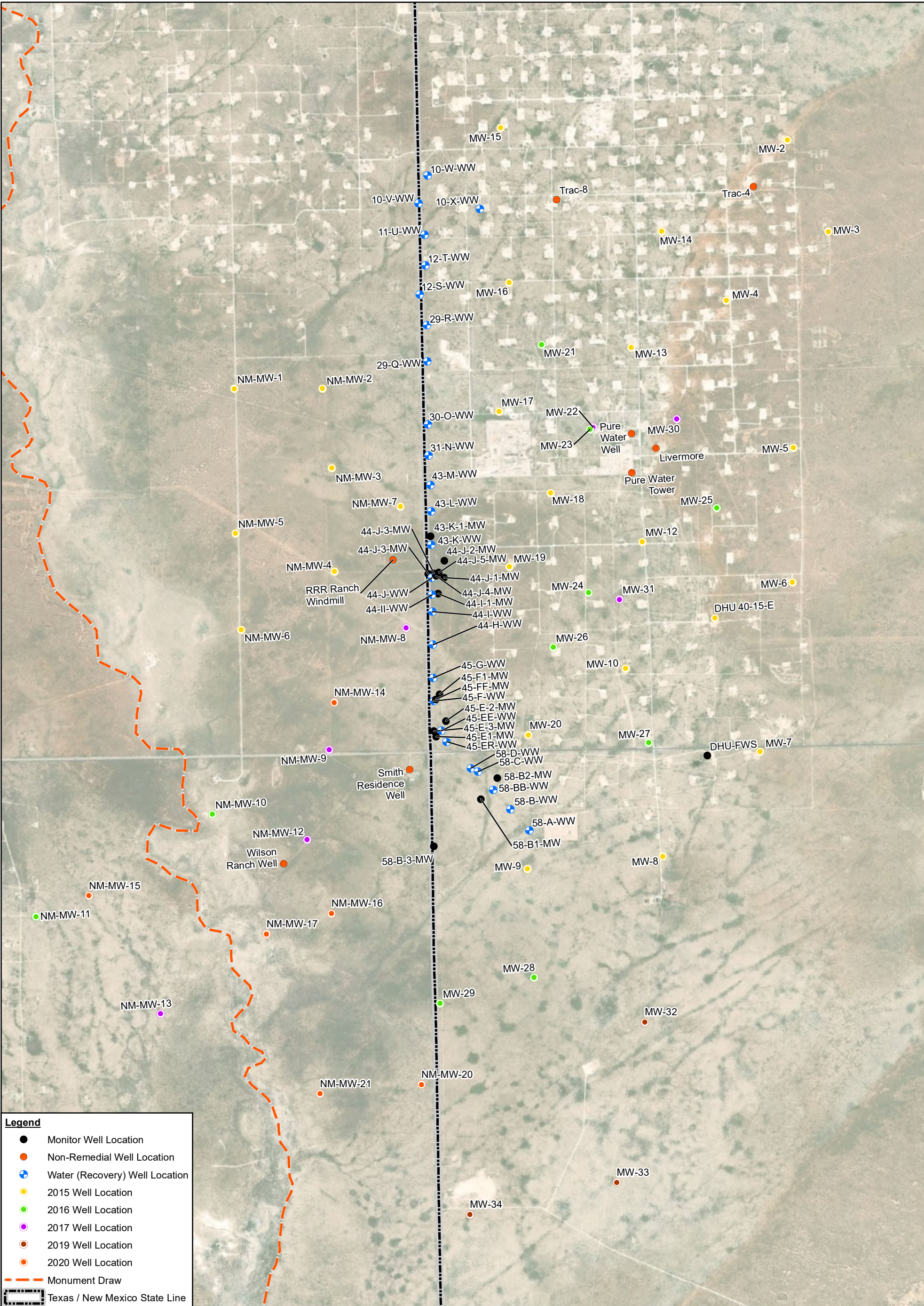


CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
CHEVRON DOLLARHIDE UNIT

SITE VICINITY MAP

055270
Jun 30, 2020

FIGURE 1

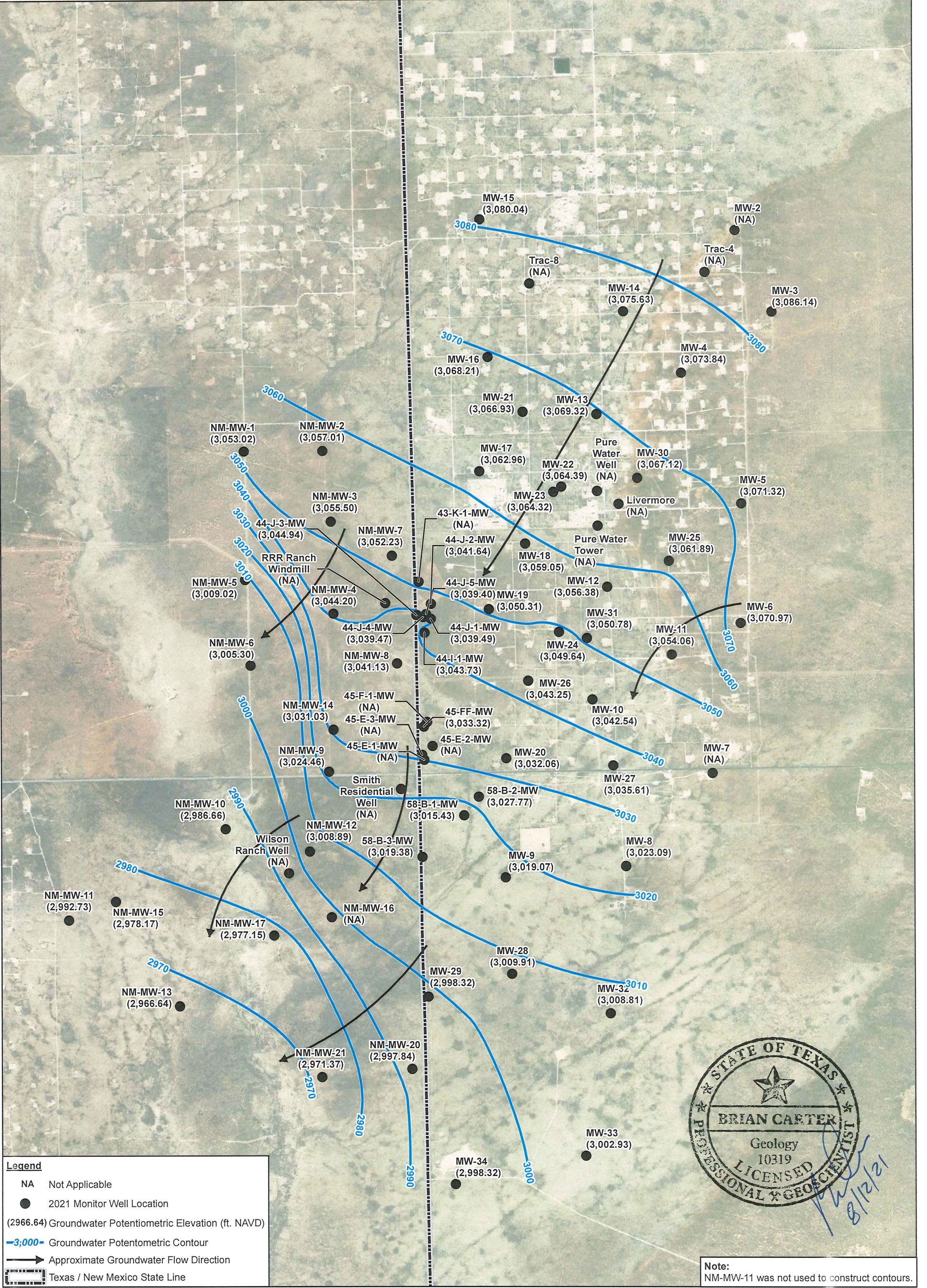


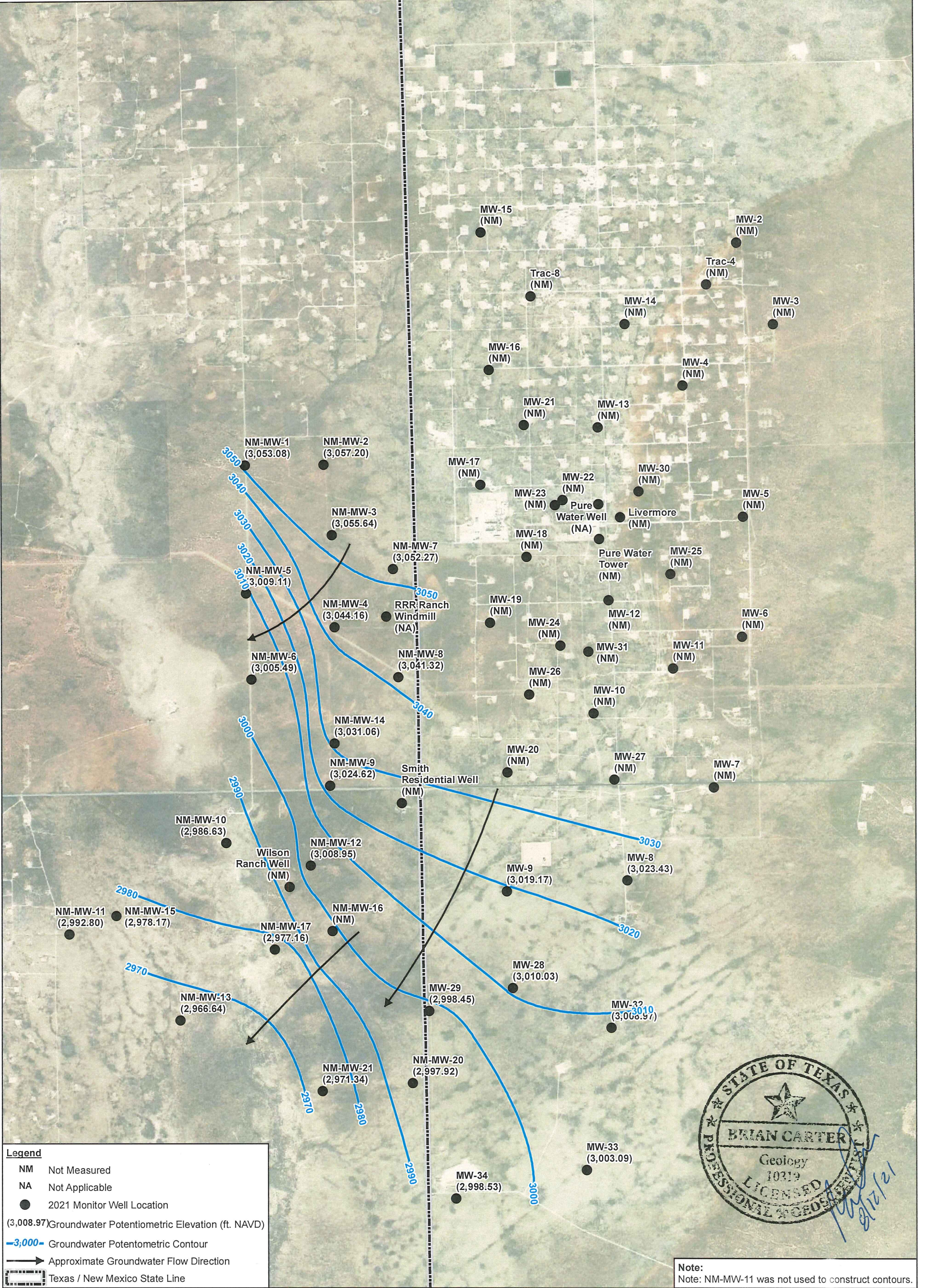
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT

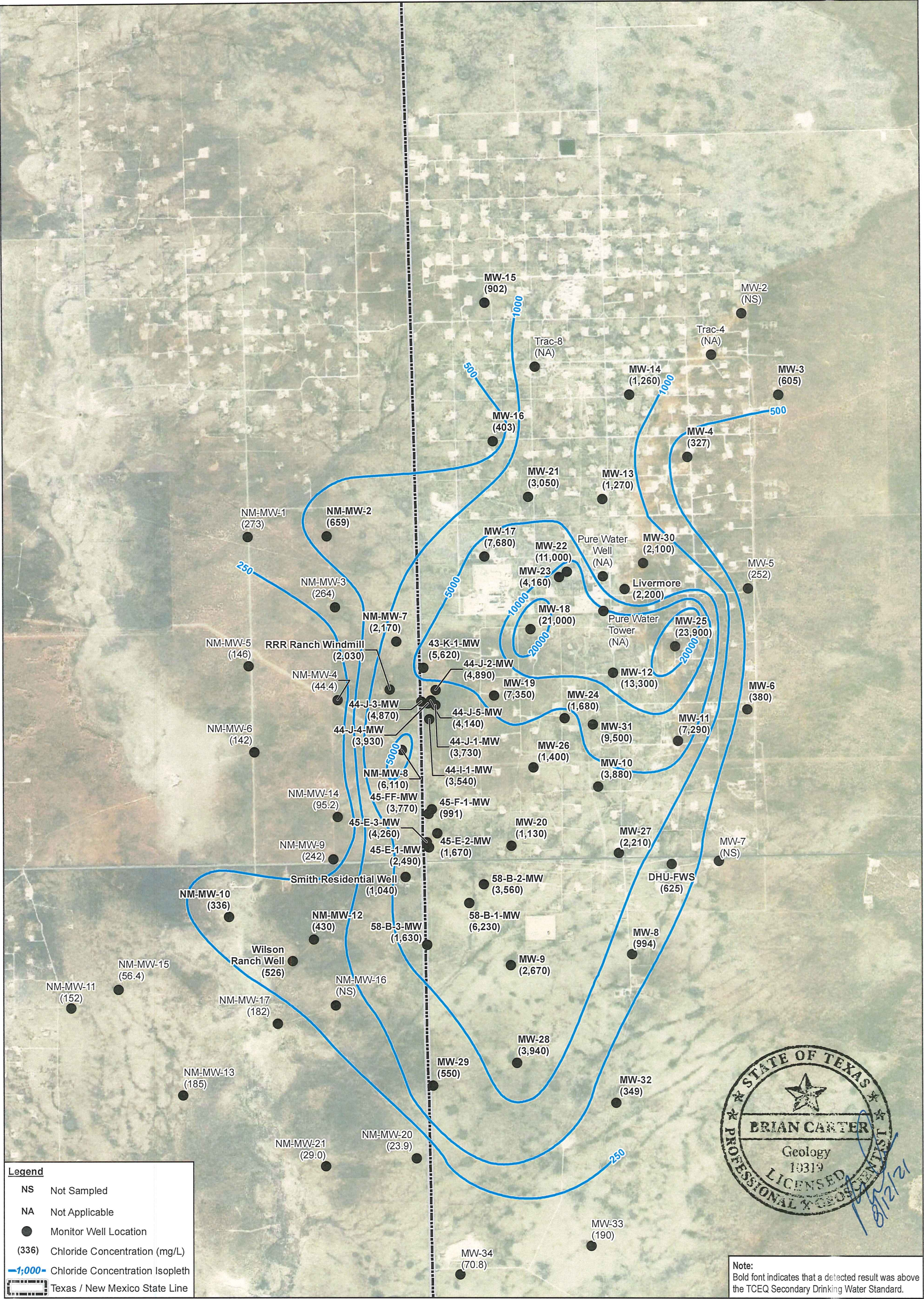
055270
Jul 2, 2020

SITE DETAILS MAP

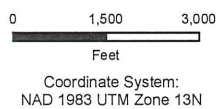
FIGURE 2







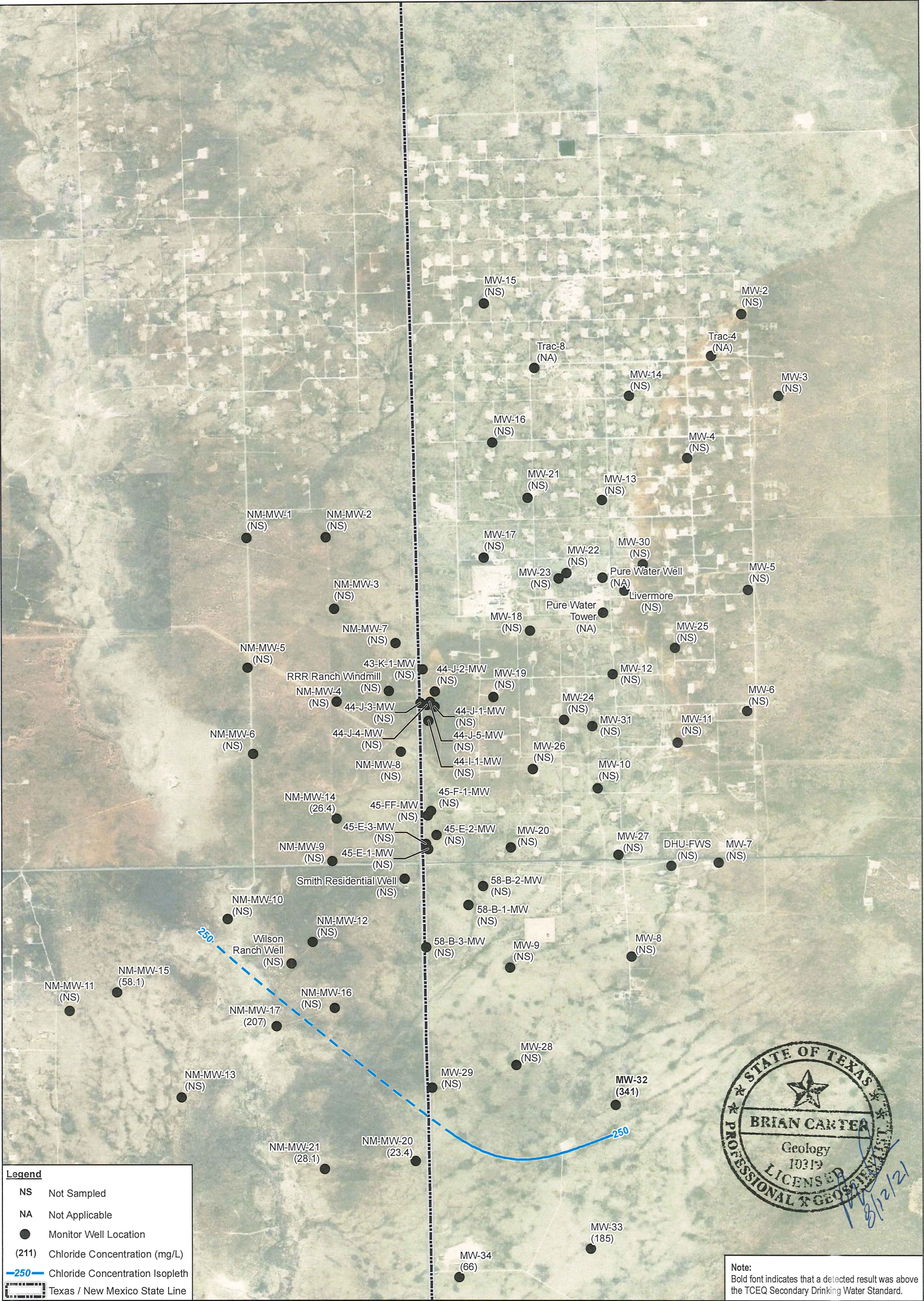
Source: ESRI World Imagery Basemap Service.



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
JANUARY 2021 GROUNDWATER CHLORIDE
CONCENTRATIONS & ISOPLETHS

055270
Jul 21, 2021

FIGURE 5



Source: ESRI World Imagery Basemap Service.

0 1,500 3,000
Feet

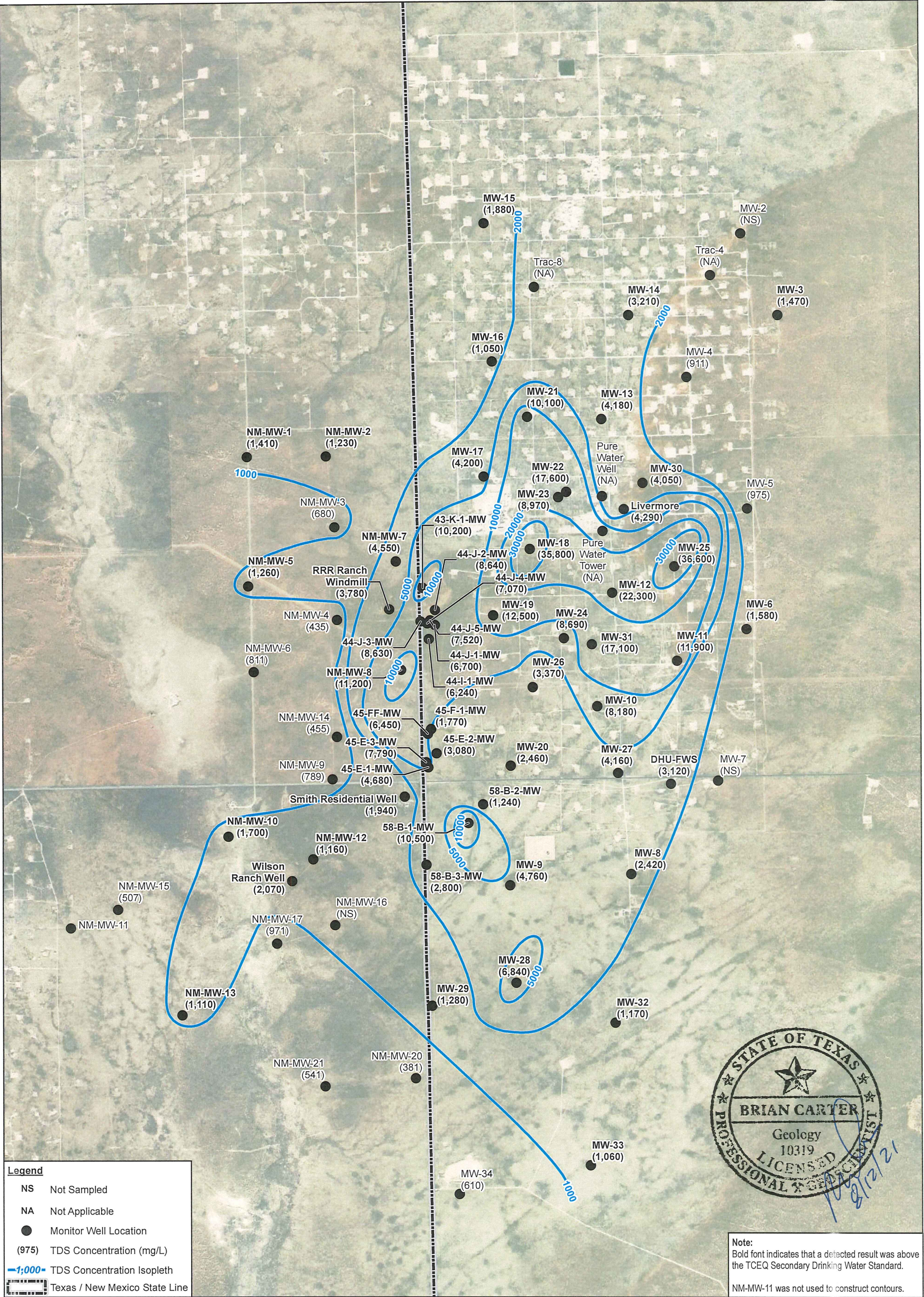
Coordinate System:
NAD 1983 UTM Zone 13N



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
APRIL 2021 GROUNDWATER CHLORIDE
CONCENTRATIONS & ISOPLETHS

055270
Jul 21, 2021

FIGURE 6



Source: ESRI World Imagery Basemap Service.

0 1,500 3,000
Feet

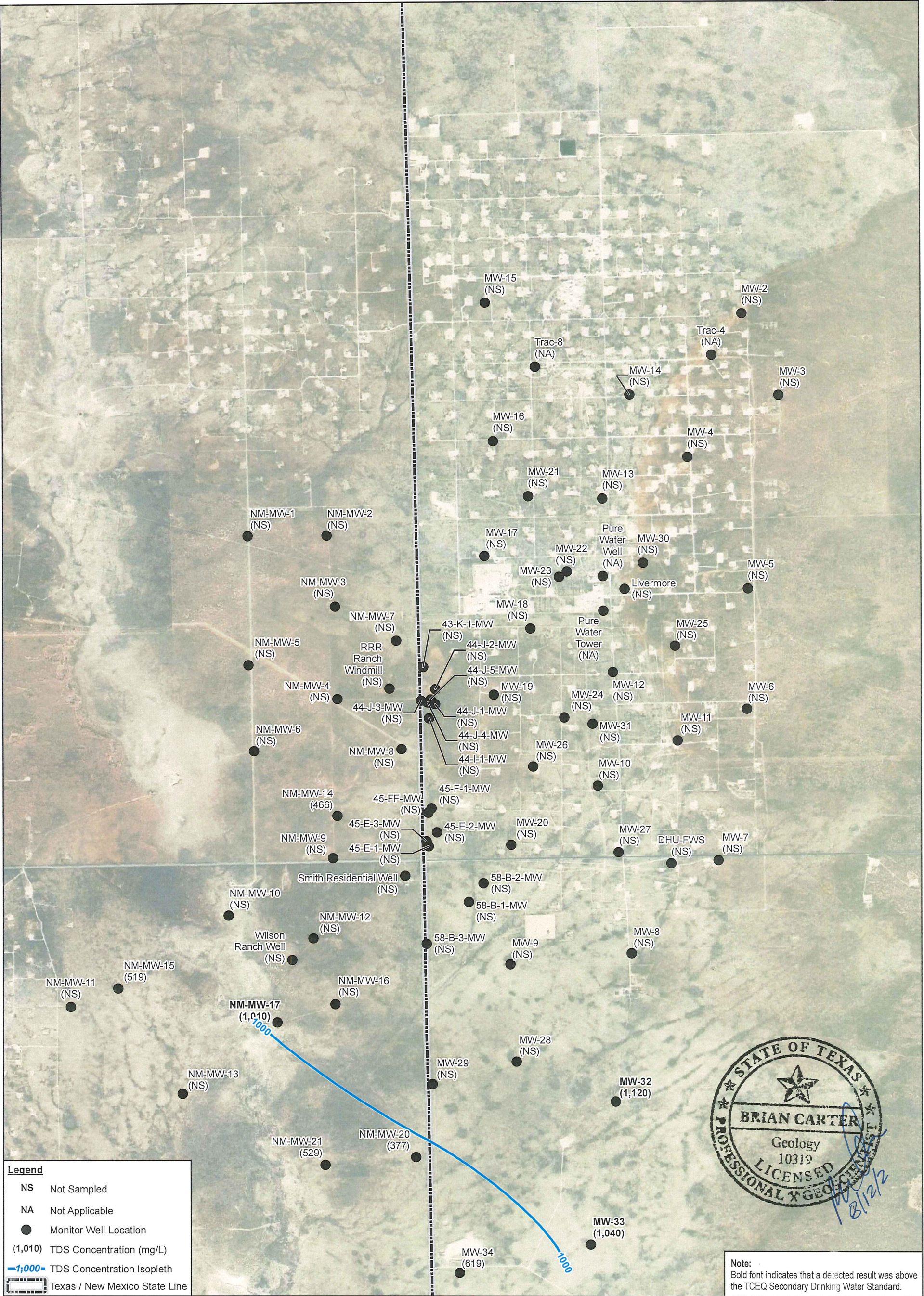
Coordinate System:
NAD 1983 UTM Zone 13N



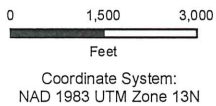
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
JANUARY 2021 GROUNDWATER TOTAL DISSOLVED
SOLIDS (TDS) CONCENTRATIONS & ISOPLETHS

055270
Jul 27, 2021

FIGURE 7



Source: ESRI World Imagery Basemap Service.



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
ANDREWS COUNTY, TEXAS
DOLLARHIDE OIL FIELD UNIT
APRIL 2021 GROUNDWATER TOTAL DISSOLVED
SOLIDS (TDS) CONCENTRATIONS & ISOPLETHS

055270
Jul 21, 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⁾
	MW-14 ⁽¹⁾

Table 1
Groundwater Well Designations
Chevron Dollarhide Unit
Dollarhide, Texas

Well Group Designation	Well Identification
Monitor Wells	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

**January 2021 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	95.20	3,043.73
44-J-1-MW	3,134.50	95.01	3,039.49
44-J-2-MW	3,135.30	93.66	3,041.64
44-J-3-MW	3,140.19	95.25	3,044.94
44-J-4-MW	3,133.69	94.22	3,039.47
44-J-5-MW	3,134.75	95.35	3,039.40
45-E-1-MW	NM	87.13	NA
45-E-2-MW	NM	84.57	NA
45-E-3-MW	NM	87.66	NA
45-F-1-MW	NM	88.95	NA
45-FF-MW	3,122.70	89.38	3,033.32
58-B-1-MW	3,100.59	85.16	3,015.43
58-B-2-MW	3,111.91	84.14	3,027.77
58-B-3-MW	3,108.46	89.08	3,019.38
MW-2	3,204.56	DRY	NA
MW-3	3,199.51	113.37	3,086.14
MW-4	3,189.69	115.85	3,073.84
MW-5	3,174.43	103.11	3,071.32
MW-6	3,165.25	94.28	3,070.97
MW-7	3,132.14	DRY	NA
MW-8	3,107.34	84.25	3,023.09
MW-9	3,103.82	84.75	3,019.07
MW-10	3,139.71	97.17	3,042.54
MW-11	3,156.65	102.59	3,054.06
MW-12	3,151.33	94.95	3,056.38
MW-13	3,168.41	99.09	3,069.32
MW-14	3,182.69	107.06	3,075.63
MW-15	3,184.55	104.51	3,080.04
MW-16	3,167.93	99.72	3,068.21
MW-17	3,147.44	84.48	3,062.96
MW-18	3,155.01	95.96	3,059.05
MW-19	3,149.90	99.59	3,050.31
MW-20	3,120.09	88.03	3,032.06
MW-21	3,159.65	92.72	3,066.93
MW-22	3,152.50	88.11	3,064.39
MW-23	3,151.66	87.34	3,064.32
MW-24	3,144.88	95.24	3,049.64
MW-25	3,165.45	103.56	3,061.89
MW-26	3,136.99	93.74	3,043.25
MW-27	3,126.99	91.38	3,035.61

Table 2

**January 2021 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-28	3,093.86	83.95	3,009.91
MW-29	3,098.60	100.28	2,998.32
MW-30	3,170.95	103.83	3,067.12
MW-31	3,145.41	94.63	3,050.78
MW-32	3,090.28	81.47	3,008.81
MW-33	3,080.02	77.09	3,002.93
MW-34	3,069.95	71.63	2,998.32
NM-MW-1	3,124.90	71.88	3,053.02
NM-MW-2	3,152.86	95.85	3,057.01
NM-MW-3	3,146.86	91.36	3,055.50
NM-MW-4	3,154.21	110.01	3,044.20
NM-MW-5	3,109.14	100.12	3,009.02
NM-MW-6	3,093.23	87.93	3,005.30
NM-MW-7	3,147.67	95.44	3,052.23
NM-MW-8	3,138.62	97.49	3,041.13
NM-MW-9	3,118.18	93.72	3,024.46
NM-MW-10	3,066.32	79.66	2,986.66
NM-MW-11	3,075.44	82.71	2,992.73
NM-MW-12	3,105.47	96.58	3,008.89
NM-MW-13	3,051.17	84.53	2,966.64
NM-MW-14	3,126.82	95.79	3,031.03
NM-MW-15	3,064.93	86.76	2,978.17
NM-MW-16	3,085.99	DRY	NA
NM-MW-17	3,035.70	58.55	2,977.15
NM-MW-20	3,091.29	93.45	2,997.84
NM-MW-21	3,047.98	76.61	2,971.37
Non-Remedial Wells			
RRR Ranch Windmill	NM	93.46	NA
Livermore	NM	95.63	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

April 2021 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	NM	NM
MW-3	3,199.51	NM	NM
MW-4	3,189.69	NM	NM
MW-5	3,174.43	NM	NM
MW-6	3,165.25	NM	NM
MW-7	3,132.14	NM	NM
MW-8	3,107.34	83.91	3,023.43
MW-9	3,103.82	84.65	3,019.17
MW-10	3,139.71	NM	NM
MW-11	3,156.65	NM	NM
MW-12	3,151.33	NM	NM
MW-13	3,168.41	NM	NM
MW-14	3,182.69	NM	NM
MW-15	3,184.55	NM	NM
MW-16	3,167.93	NM	NM
MW-17	3,147.44	NM	NM
MW-18	3,155.01	NM	NM
MW-19	3,149.90	NM	NM
MW-20	3,120.09	NM	NM
MW-21	3,159.65	NM	NM
MW-22	3,152.50	NM	NM
MW-23	3,151.66	NM	NM
MW-24	3,144.88	NM	NM
MW-25	3,165.45	NM	NM
MW-26	3,136.99	NM	NM
MW-27	3,126.99	NM	NM
MW-28	3,093.86	83.83	3,010.03
MW-29	3,098.60	100.15	2,998.45
MW-30	3,170.95	NM	NM
MW-31	3,145.41	NM	NM
MW-32	3,090.28	81.31	3,008.97
MW-33	3,080.02	76.93	3,003.09
MW-34	3,069.95	71.42	2,998.53

Table 3

April 2021 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	71.82	3,053.08
NM-MW-2	3,152.86	95.66	3,057.20
NM-MW-3	3,146.86	91.22	3,055.64
NM-MW-4	3,154.21	110.05	3,044.16
NM-MW-5	3,109.14	100.03	3,009.11
NM-MW-6	3,093.23	87.74	3,005.49
NM-MW-7	3,147.67	95.40	3,052.27
NM-MW-8	3,138.62	97.30	3,041.32
NM-MW-9	3,118.18	93.56	3,024.62
NM-MW-10	3,066.32	79.69	2,986.63
NM-MW-11	3,075.44	82.64	2,992.80
NM-MW-12	3,105.47	96.52	3,008.95
NM-MW-13	3,051.17	84.53	2,966.64
NM-MW-14	3,126.82	95.76	3,031.06
NM-MW-15	3,064.93	86.76	2,978.17
NM-MW-16	3,085.99	DRY	NM
NM-MW-17	3,035.70	58.54	2,977.16
NM-MW-20	3,091.29	93.37	2,997.92
NM-MW-21	3,047.98	76.64	2,971.34
Non-Remedial Wells			
RRR Ranch Windmill	NM	93.42	NM
Livermore	NM	NM	NM
Pure Water Tower	3,154.43	NM	NM
TRAC-4	NM	NM	NM
TRAC-8	NM	NM	NM
Pure Water Well	3,151.80	NM	NM
Smith Residential Well	NM	NM	NM
Wilson Ranch	NM	NM	NM

Notes:

ft = feet

NM = Not Measured

NA = Not Applicable

TOC = top of casing

NAVD = North American Vertical Datum

Table 4

**First Half 2021 Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Andrews County, Texas**

Sample ID	January		April	
	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	5,620	10,200	NS	NS
44-I-1-MW	3,540	6,240	NS	NS
44-J-1-MW	3,730	6,700	NS	NS
44-J-2-MW	4,890	8,640	NS	NS
44-J-3-MW	4,870	8,630	NS	NS
44-J-4-MW	3,930	7,070	NS	NS
44-J-5-MW	4,140	7,520	NS	NS
45-E-1-MW	2,490	4,680	NS	NS
45-E-2-MW	1,670	3,080	NS	NS
45-E-3-MW	4,260	7,790	NS	NS
45-F-1-MW	991	1,770	NS	NS
45-FF-MW	3,770	6,450	NS	NS
58-B-1-MW	6,230	10,500	NS	NS
58-B-2-MW	3,560	1,240	NS	NS
58-B-3-MW	1,630	2,800	NS	NS
MW-2	NS	NS	NS	NS
MW-3	605	1,470	NS	NS
MW-4	327	911	NS	NS
MW-5	252	975	NS	NS
MW-6	380	1,580	NS	NS
MW-7	NS	NS	NS	NS
MW-8	994	2,420	NS	NS
MW-9	2,670	4,760	NS	NS
MW-10	3,880	8,180	NS	NS
MW-11	7,290	11,900	NS	NS
MW-12	13,300	22,300	NS	NS
MW-13	1,270	4,180	NS	NS
MW-14	1,260	3,210	NS	NS
MW-15	902	1,880	NS	NS
MW-16	403	1,050	NS	NS
MW-17	7,680	4,200	NS	NS
MW-18	21,000	35,800	NS	NS
MW-19	7,350	12,500	NS	NS
MW-20	1,130	2,460	NS	NS
MW-21	3,050	10,100	NS	NS
MW-22	11,000	17,600	NS	NS
MW-23	4,160	8,970	NS	NS
MW-24	1,680	8,690	NS	NS
MW-25	23,900	36,600	NS	NS
MW-26	1,400	3,370	NS	NS
MW-27	2,210	4,160	NS	NS

Table 4

**First Half 2021 Groundwater Analytical Results Summary
Chevron Dollarhide Unit
Andrews County, Texas**

Sample ID	January		April	
	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-28	3,940	6,840	NS	NS
MW-29	550	1,280	NS	NS
MW-30	2,100	4,050	NS	NS
MW-31	9,500	17,100	NS	NS
MW-32	349	1,170	341	1,120
MW-33	190	1,060	185	1,040
MW-34	70.8	610	66.0	619
NM-MW-1	273	1,410	NS	NS
NM-MW-2	659	1,230	NS	NS
NM-MW-3	264	680	NS	NS
NM-MW-4	44.4	435	NS	NS
NM-MW-5	146	1,260	NS	NS
NM-MW-6	142	811	NS	NS
NM-MW-7	2,170	4,550	NS	NS
NM-MW-8	6,110	11,200	NS	NS
NM-MW-9	242	789	NS	NS
NM-MW-10	336	1,700	NS	NS
NM-MW-11	152	2,030	NS	NS
NM-MW-12	430	1,160	NS	NS
NM-MW-13	185	1,110	NS	NS
NM-MW-14	95.2	455	26.4	466
NM-MW-15	56.4	507	58.1	519
NM-MW-16	NS	NS	NS	NS
NM-MW-17	182	971	207	1,010
NM-MW-20	23.9	381	23.4	377
NM-MW-21	29.0	541	28.1	529
Non-Remedial Wells				
Livermore	2,200	4,290	NS	NS
Pure Water Tower	NA	NA	NA	NA
Pure Water Well	NA	NA	NA	NA
RRR Ranch Windmill	2,030	3,780	NS	NS
Smith Residential Well	1,040	1,940	NS	NS
TRAC-4	NA	NA	NA	NA
TRAC-8	NA	NA	NA	NA
Wilson Ranch	526	2,070	NS	NS
DHU-FWS	625	3,120	NS	NS

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
	01/06/21	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
	01/06/21	106.07	95.20	NA	NA	3,043.73

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
	01/06/21	110.58	95.01	NA	NA	3,039.49
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
	01/06/21	108.69	93.66	NA	NA	3,041.64

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⁾
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
	01/06/21	114.45	95.25	NA	NA	3,044.94
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
	01/06/21	113.31	94.22	NA	NA	3,039.47

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
	01/06/21	113.68	95.35	NA	NA	3,039.40
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
	01/06/21	102.91	87.13	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
	01/06/21	104.11	84.57	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
	01/06/21	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
	01/06/21	106.88	88.95	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
	01/06/21	110.83	89.38	NA	NA	3,033.32

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
	01/05/21	104.47	85.16	NA	NA	3,015.43
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
	01/05/21	104.66	84.14	NA	NA	3,027.77

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
	01/05/21	100.73	89.08	NA	NA	3,019.38
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
	1/6/2021	109.13	DRY	NA	NA	DRY

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-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
	1/6/2021	119.39	113.37	NA	NA	3,086.14
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
	1/6/2021	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
	1/7/2021	116.96	103.11	NA	NA	3,071.32

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-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
	1/7/2021	130.92	94.28	NA	NA	3,070.97
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
	1/5/2021	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
	1/5/2021	110.98	84.25	NA	NA	3,023.09
	4/6/2021	110.98	83.91	NA	NA	3,023.43

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
	1/5/2021	101.63	84.75	NA	NA	3,019.07
	4/6/2021	101.63	84.65	NA	NA	3,019.17
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
	1/7/2021	116.39	97.17	NA	NA	3,042.54
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
	1/7/2021	110.04	102.59	NA	NA	3,054.06

Appendix A
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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-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
	1/7/2021	114.14	94.95	NA	NA	3,056.38
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
	1/6/2021	127.89	99.09	NA	NA	3,069.32
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
	1/6/2021	124.48	107.06	NA	NA	3,075.63

Appendix A
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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-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
	1/6/2021	126.61	104.51	NA	NA	3,080.04
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
	1/6/2021	119.06	99.72	NA	NA	3,068.21
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
	1/7/2021	118.32	84.48	NA	NA	3,062.96

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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-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
	1/7/2021	122.36	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
	1/7/2021	115.01	99.59	NA	NA	3,050.31
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
	1/7/2021	112.55	88.03	NA	NA	3,032.06

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-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
	1/7/2021	123.75	92.72	NA	NA	3,066.93
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
	1/7/2021	117.14	88.11	NA	NA	3,064.39
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
	1/7/2021	124.93	87.34	NA	NA	3,064.32

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
	1/7/2021	115.44	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
	1/7/2021	116.84	103.56	NA	NA	3,061.89
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
	1/7/2021	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
	1/7/2021	108.41	91.38	NA	NA	3,035.61
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
	1/5/2021	104.04	83.95	NA	NA	3,009.91
	4/6/2021	104.04	83.83	NA	NA	3,010.03
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
	1/5/2021	113.43	100.28	NA	NA	2,998.32
	4/6/2021	113.43	100.15	NA	NA	2,998.45

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⁾
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
	1/7/2021	123.92	103.83	NA	NA	3,067.12
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
	1/7/2021	102.75	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
	1/4/2021	94.45	81.47	NA	NA	3,008.81
	4/6/2021	94.45	81.31	NA	NA	3,008.97
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
	1/4/2021	92.67	77.09	NA	NA	3,002.93
	4/6/2021	92.67	76.93	NA	NA	3,003.09
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
	1/4/2021	78.06	71.63	NA	NA	2,998.32
	4/6/2021	78.06	71.42	NA	NA	2,998.53

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-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
	1/5/2021	105.94	71.88	NA	NA	3,053.02
	4/6/2021	105.94	71.82	NA	NA	3,053.08
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
	1/5/2021	120.60	95.85	NA	NA	3,057.01
	4/6/2021	120.60	95.66	NA	NA	3,057.20
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
	1/5/2021	105.40	91.36	NA	NA	3,055.50
	4/6/2021	105.40	91.22	NA	NA	3,055.64

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⁾
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
	1/5/2021	117.16	110.01	NA	NA	3,044.20
	4/6/2021	117.16	110.05	NA	NA	3,044.16
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
	1/5/2021	114.55	100.12	NA	NA	3,009.02
	4/6/2021	114.55	100.03	NA	NA	3,009.11
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
	1/5/2021	121.80	87.93	NA	NA	3,005.30
	4/6/2021	121.80	87.74	NA	NA	3,005.49

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-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
	1/5/2021	105.84	95.44	NA	NA	3,052.23
	4/6/2021	105.84	95.40	NA	NA	3,052.27
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
	1/5/2021	108.28	97.49	NA	NA	3,041.13
	4/6/2021	108.28	97.30	NA	NA	3,041.32
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
	1/5/2021	96.80	93.72	NA	NA	3,024.46
	4/6/2021	96.80	93.56	NA	NA	3,024.62

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
	1/5/2021	108.41	79.66	NA	NA	2,986.66
	4/6/2021	108.41	79.69	NA	NA	2,986.63
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
	1/4/2021	163.00	82.71	NA	NA	2,992.73
	4/6/2021	163.00	82.64	NA	NA	2,992.80
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
	1/5/2021	98.56	96.58	NA	NA	3,008.89
	4/6/2021	98.56	96.52	NA	NA	3,008.95
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
	1/4/2021	111.73	84.53	NA	NA	2,966.64
	4/6/2021	111.73	84.53	NA	NA	2,966.64

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⁾
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
	1/5/2021	97.68	95.79	NA	NA	3,031.03
	4/6/2021	97.68	95.76	NA	NA	3,031.06
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
	1/4/2021	98.20	86.76	NA	NA	2,978.17
	4/6/2021	98.20	86.76	NA	NA	2,978.17
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
	1/4/2021	93.11	DRY	NA	NA	NA
	4/6/2021	93.02	DRY	NA	NA	NA
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
	1/4/2021	86.73	58.55	NA	NA	2,977.15
	4/6/2021	86.73	58.54	NA	NA	2,977.16
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
	1/4/2021	97.77	93.45	NA	NA	2,997.84
	4/6/2021	97.77	93.37	NA	NA	2,997.92
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
	1/4/2021	78.55	76.61	NA	NA	2,971.37
	4/6/2021	78.55	76.64	NA	NA	2,971.34
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
	1/7/2021	99.74	95.63	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⁾
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
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
	1/5/2021	96.33	93.46	NA	NA	NA
	4/6/2021	96.33	93.42	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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-1118-1
Client Project/Site: Dollarhide

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Christopher Knight

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

Authorized for release by:
4/19/2021 5:52:56 PM

Debbie Simmons, Project Manager
(281)240-4200
debbie.simmons@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: GHD Services Inc.
Project/Site: Dollarhide

Laboratory Job ID: 880-1118-1

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Midland

Case Narrative

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Job ID: 880-1118-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-1118-1

Receipt

The samples were received on 4/7/2021 3:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Client Sample ID: NM-MW-15-W-210704

Lab Sample ID: 880-1118-1

Date Collected: 04/07/21 10:50

Matrix: Water

Date Received: 04/07/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.1		2.50	0.105	mg/L			04/18/21 18:14	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	519		50.0	50.0	mg/L			04/12/21 08:50	1

Client Sample ID: NM-MW-17-W-210704

Lab Sample ID: 880-1118-2

Date Collected: 04/07/21 11:10

Matrix: Water

Date Received: 04/07/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	207		2.50	0.105	mg/L			04/18/21 18:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1010		50.0	50.0	mg/L			04/12/21 08:50	1

Client Sample ID: NM-MW-20-W-210704

Lab Sample ID: 880-1118-3

Date Collected: 04/07/21 11:50

Matrix: Water

Date Received: 04/07/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.4		0.500	0.0210	mg/L			04/18/21 18:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	377		50.0	50.0	mg/L			04/12/21 08:50	1

Client Sample ID: NM-MW-21-W-210704

Lab Sample ID: 880-1118-4

Date Collected: 04/07/21 12:15

Matrix: Water

Date Received: 04/07/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.1		2.50	0.105	mg/L			04/18/21 18:30	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	529		50.0	50.0	mg/L			04/12/21 08:50	1

Eurofins Xenco, Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1981/38

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.0210	U	0.500	0.0210	mg/L			04/18/21 17:44	1

Lab Sample ID: LCS 880-1981/39

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.71		mg/L		103	90 - 110

Lab Sample ID: LCSD 880-1981/40

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25.0	25.75		mg/L		103	90 - 110	0	20

Lab Sample ID: 880-1183-A-1 MS

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	170		125	282.3	N1	mg/L		89	90 - 110

Lab Sample ID: 880-1183-A-1 MSD

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	170		125	280.6	N1	mg/L		88	90 - 110	1	20

Lab Sample ID: 880-1204-A-1 MS

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11.7		25.0	37.31		mg/L		102	90 - 110

Lab Sample ID: 880-1204-A-1 MSD

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11.7		25.0	37.01		mg/L		101	90 - 110	1	20

Eurofins Xenco, Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 830-169/1

Matrix: Water

Analysis Batch: 169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0	25.0	mg/L			04/12/21 08:50	1

Lab Sample ID: LCS 830-169/2

Matrix: Water

Analysis Batch: 169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1009		mg/L		101	90 - 110

Lab Sample ID: LCSD 830-169/3

Matrix: Water

Analysis Batch: 169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	981.0		mg/L		98	90 - 110	3	10

Lab Sample ID: 830-259-C-1 DU

Matrix: Water

Analysis Batch: 169

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2140		2122		mg/L		0.8	10

Eurofins Xenco, Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

HPLC/IC

Analysis Batch: 1981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1118-1	NM-MW-15-W-210704	Total/NA	Water	300.0	
880-1118-2	NM-MW-17-W-210704	Total/NA	Water	300.0	
880-1118-3	NM-MW-20-W-210704	Total/NA	Water	300.0	
880-1118-4	NM-MW-21-W-210704	Total/NA	Water	300.0	
MB 880-1981/38	Method Blank	Total/NA	Water	300.0	
LCS 880-1981/39	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-1981/40	Lab Control Sample Dup	Total/NA	Water	300.0	
880-1183-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-1183-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
880-1204-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-1204-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1118-1	NM-MW-15-W-210704	Total/NA	Water	SM 2540C	
880-1118-2	NM-MW-17-W-210704	Total/NA	Water	SM 2540C	
880-1118-3	NM-MW-20-W-210704	Total/NA	Water	SM 2540C	
880-1118-4	NM-MW-21-W-210704	Total/NA	Water	SM 2540C	
MB 830-169/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 830-169/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 830-169/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
830-259-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Eurofins Xenco, Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Client Sample ID: NM-MW-15-W-210704**Lab Sample ID: 880-1118-1****Date Collected: 04/07/21 10:50****Matrix: Water****Date Received: 04/07/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/18/21 18:14	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Client Sample ID: NM-MW-17-W-210704**Lab Sample ID: 880-1118-2****Date Collected: 04/07/21 11:10****Matrix: Water****Date Received: 04/07/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/18/21 18:20	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Client Sample ID: NM-MW-20-W-210704**Lab Sample ID: 880-1118-3****Date Collected: 04/07/21 11:50****Matrix: Water****Date Received: 04/07/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1981	04/18/21 18:25	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Client Sample ID: NM-MW-21-W-210704**Lab Sample ID: 880-1118-4****Date Collected: 04/07/21 12:15****Matrix: Water****Date Received: 04/07/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/18/21 18:30	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Laboratory References:

XEP = Eurofins Xenco, El Paso, 200 East Sunset Rd., Suite E, El Paso, TX 79922, TEL (915)585-3443

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

Laboratory: Eurofins Xenco, El Paso

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704221-20-18	04-30-21

Eurofins Xenco, Midland

Method Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XM
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEP

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

XEP = Eurofins Xenco, El Paso, 200 East Sunset Rd., Suite E, El Paso, TX 79922, TEL (915)585-3443
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

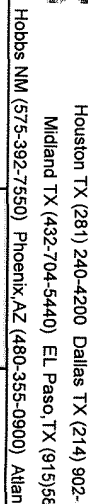
Sample Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1118-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1118-1	NM-MW-15-W-210704	Water	04/07/21 10:50	04/07/21 15:58	
880-1118-2	NM-MW-17-W-210704	Water	04/07/21 11:10	04/07/21 15:58	
880-1118-3	NM-MW-20-W-210704	Water	04/07/21 11:50	04/07/21 15:58	
880-1118-4	NM-MW-21-W-210704	Water	04/07/21 12:15	04/07/21 15:58	

Eurofins Xenco, Midland



Chain of

WOM

880-1118



WMA

Project Manager:		Nick Casten	Bill to: (if different)	Gina Blair- Apr	880-1118 Chain of Custody
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	

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 ☐	
---	--

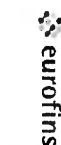
[illegible]

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.

1631 / 245.1 / 7470 / 7471 Hg

Revised Date 051418 Rev 2018

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-1118-1

Login Number: 1118

List Source: Eurofins Midland

List Number: 1

Creator: Teel, Brianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-1118-1

Login Number: 1118

List Number: 2

Creator: Aparicio, Niria

List Source: Eurofins El Paso

List Creation: 04/09/21 12:24 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-1119-1
Client Project/Site: Dollarhide

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Nick G. Casten

A handwritten signature in cursive script that reads "Debbie Simmons".

Authorized for release by:
4/19/2021 8:19:26 PM

Debbie Simmons, Project Manager
(281)240-4200
debbie.simmons@eurofinset.com

LINKS

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results through

TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: GHD Services Inc.
Project/Site: Dollarhide

Laboratory Job ID: 880-1119-1

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Job ID: 880-1119-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-1119-1

Receipt

The sample was received on 4/7/2021 3:58 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Client Sample ID: NM-MW-14-W-210704

Lab Sample ID: 880-1119-1

Date Collected: 04/07/21 10:10

Matrix: Water

Date Received: 04/07/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.4		0.500	0.0210	mg/L			04/18/21 18:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	466		50.0	50.0	mg/L			04/12/21 08:50	1

Eurofins Xenco, Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1981/38

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.0210	U	0.500	0.0210	mg/L			04/18/21 17:44	1

Lab Sample ID: LCS 880-1981/39

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.71		mg/L		103	90 - 110

Lab Sample ID: LCSD 880-1981/40

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25.0	25.75		mg/L		103	90 - 110	0	20

Lab Sample ID: 880-1204-A-1 MS

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11.7		25.0	37.31		mg/L		102	90 - 110

Lab Sample ID: 880-1204-A-1 MSD

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11.7		25.0	37.01		mg/L		101	90 - 110	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 830-169/1

Matrix: Water

Analysis Batch: 169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0	25.0	mg/L			04/12/21 08:50	1

Lab Sample ID: LCS 830-169/2

Matrix: Water

Analysis Batch: 169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1009		mg/L		101	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 830-169/3

Matrix: Water

Analysis Batch: 169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	981.0		mg/L		98	90 - 110	3	10

Lab Sample ID: 830-259-C-1 DU

Matrix: Water

Analysis Batch: 169

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2140		2122		mg/L		0.8	10

Eurofins Xenco, Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

HPLC/IC

Analysis Batch: 1981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1119-1	NM-MW-14-W-210704	Total/NA	Water	300.0	
MB 880-1981/38	Method Blank	Total/NA	Water	300.0	
LCS 880-1981/39	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-1981/40	Lab Control Sample Dup	Total/NA	Water	300.0	
880-1204-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-1204-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1119-1	NM-MW-14-W-210704	Total/NA	Water	SM 2540C	
MB 830-169/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 830-169/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 830-169/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
830-259-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Eurofins Xenco, Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Client Sample ID: NM-MW-14-W-210704
Date Collected: 04/07/21 10:10
Date Received: 04/07/21 15:58

Lab Sample ID: 880-1119-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1981	04/18/21 18:45	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Laboratory References:
XEP = Eurofins Xenco, El Paso, 200 East Sunset Rd., Suite E, El Paso, TX 79922, TEL (915)585-3443
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

Laboratory: Eurofins Xenco, El Paso

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704221-20-18	04-30-21

Eurofins Xenco, Midland

Method Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XM
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEP

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

XEP = Eurofins Xenco, El Paso, 200 East Sunset Rd., Suite E, El Paso, TX 79922, TEL (915)585-3443
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1119-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1119-1	NM-MW-14-W-210704	Water	04/07/21 10:10	04/07/21 15:58	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



620-2000)

880-1119

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

ANALYSIS REQUEST										Work Order Notes
Number of Containers ies										TAT starts the day received by the lab if received by 4:30pm

[illegible]

1631 / 245.1 / 7470 / 7471 Ho

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 <i>Joe Munk</i>		4/7/24 15 58	2		
3			4		
5			6		

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-1119-1

Login Number: 1119

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-1119-1

Login Number: 1119

List Number: 2

Creator: Aparicio, Niria

List Source: Eurofins El Paso

List Creation: 04/09/21 12:24 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-1120-1
Client Project/Site: Dollarhide

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Christopher Knight

A handwritten signature in cursive script that reads "Debbie Simmons".

Authorized for release by:
4/19/2021 8:15:51 PM

Debbie Simmons, Project Manager
(281)240-4200
debbie.simmons@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: GHD Services Inc.
Project/Site: Dollarhide

Laboratory Job ID: 880-1120-1

Table of Contents

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Job ID: 880-1120-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-1120-1

Receipt

The samples were received on 4/8/2021 3:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Client Sample ID: MW-32-W-210704

Lab Sample ID: 880-1120-1

Date Collected: 04/07/21 13:00

Matrix: Water

Date Received: 04/08/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	341		2.50	0.105	mg/L			04/19/21 15:29	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1120		100	100	mg/L			04/12/21 08:50	1

Client Sample ID: MW-33-W-210704

Lab Sample ID: 880-1120-2

Date Collected: 04/07/21 12:45

Matrix: Water

Date Received: 04/08/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		2.50	0.105	mg/L			04/18/21 18:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1040		100	100	mg/L			04/12/21 08:50	1

Client Sample ID: MW-34-W-210704

Lab Sample ID: 880-1120-3

Date Collected: 04/07/21 12:30

Matrix: Water

Date Received: 04/08/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.0		2.50	0.105	mg/L			04/18/21 19:00	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	619		50.0	50.0	mg/L			04/12/21 08:50	1

Client Sample ID: MW-32-WD-210704

Lab Sample ID: 880-1120-4

Date Collected: 04/07/21 00:00

Matrix: Water

Date Received: 04/08/21 15:58

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	323		2.50	0.105	mg/L			04/18/21 19:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1170		100	100	mg/L			04/12/21 08:50	1

Eurofins Xenco, Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1981/38

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.0210	U	0.500	0.0210	mg/L			04/18/21 17:44	1

Lab Sample ID: LCS 880-1981/39

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.71		mg/L		103	90 - 110

Lab Sample ID: LCSD 880-1981/40

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25.0	25.75		mg/L		103	90 - 110	0	20

Lab Sample ID: 880-1183-A-1 MS

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	170		125	282.3	N1	mg/L		89	90 - 110

Lab Sample ID: 880-1183-A-1 MSD

Matrix: Water

Analysis Batch: 1981

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	170		125	280.6	N1	mg/L		88	90 - 110	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 830-169/1

Matrix: Water

Analysis Batch: 169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0	25.0	mg/L			04/12/21 08:50	1

Lab Sample ID: LCS 830-169/2

Matrix: Water

Analysis Batch: 169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1009		mg/L		101	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 830-169/3

Matrix: Water

Analysis Batch: 169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	981.0		mg/L		98	90 - 110	3	10

Lab Sample ID: 830-259-C-1 DU

Matrix: Water

Analysis Batch: 169

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2140		2122		mg/L		0.8	10

Eurofins Xenco, Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

HPLC/IC

Analysis Batch: 1981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1120-1	MW-32-W-210704	Total/NA	Water	300.0	
880-1120-2	MW-33-W-210704	Total/NA	Water	300.0	
880-1120-3	MW-34-W-210704	Total/NA	Water	300.0	
880-1120-4	MW-32-WD-210704	Total/NA	Water	300.0	
MB 880-1981/38	Method Blank	Total/NA	Water	300.0	
LCS 880-1981/39	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-1981/40	Lab Control Sample Dup	Total/NA	Water	300.0	
880-1183-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-1183-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1120-1	MW-32-W-210704	Total/NA	Water	SM 2540C	
880-1120-2	MW-33-W-210704	Total/NA	Water	SM 2540C	
880-1120-3	MW-34-W-210704	Total/NA	Water	SM 2540C	
880-1120-4	MW-32-WD-210704	Total/NA	Water	SM 2540C	
MB 830-169/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 830-169/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 830-169/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
830-259-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Eurofins Xenco, Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Client Sample ID: MW-32-W-210704**Lab Sample ID: 880-1120-1****Date Collected: 04/07/21 13:00****Matrix: Water****Date Received: 04/08/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/19/21 15:29	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Client Sample ID: MW-33-W-210704**Lab Sample ID: 880-1120-2****Date Collected: 04/07/21 12:45****Matrix: Water****Date Received: 04/08/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/18/21 18:55	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Client Sample ID: MW-34-W-210704**Lab Sample ID: 880-1120-3****Date Collected: 04/07/21 12:30****Matrix: Water****Date Received: 04/08/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/18/21 19:00	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Client Sample ID: MW-32-WD-210704**Lab Sample ID: 880-1120-4****Date Collected: 04/07/21 00:00****Matrix: Water****Date Received: 04/08/21 15:58**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1981	04/18/21 19:05	CH	XM
Total/NA	Analysis	SM 2540C		1	169	04/12/21 08:50	DH	XEP

Laboratory References:

XEP = Eurofins Xenco, El Paso, 200 East Sunset Rd., Suite E, El Paso, TX 79922, TEL (915)585-3443

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

Laboratory: Eurofins Xenco, El Paso

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704221-20-18	04-30-21

Eurofins Xenco, Midland

Method Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XM
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEP

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

XEP = Eurofins Xenco, El Paso, 200 East Sunset Rd., Suite E, El Paso, TX 79922, TEL (915)585-3443
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: GHD Services Inc.
Project/Site: Dollarhide

Job ID: 880-1120-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1120-1	MW-32-W-210704	Water	04/07/21 13:00	04/08/21 15:58	
880-1120-2	MW-33-W-210704	Water	04/07/21 12:45	04/08/21 15:58	
880-1120-3	MW-34-W-210704	Water	04/07/21 12:30	04/08/21 15:58	
880-1120-4	MW-32-WD-210704	Water	04/07/21 00:00	04/08/21 15:58	

Eurofins Xenco, Midland



Houston, TX (281) 240-4200 Dallas, TX
Midland TX (432-704-5440) EL Paso
880-1120 Chain of Custody

Chair



880-1120

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

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

ANALYSIS REQUEST										Work Order Notes		
Project Name		Dollarhide			Turn Around							
Project Number		55270			Routine		☒					
P.O. Number:					Rush.							
Sampler's Name		Charles Melish Joe Mirkes			Due Date							
SAMPLE RECEIPT					Temp Blank		Yes (No)		Wet Ice		☒ Yes No	
Temperature (°C)		3.5/4.0					Thermometer ID		K8			
Received intact:		(Yes) No										
Cooler Custody Seals		Yes No N/A					Correction Factor		0.5			
Sample Custody Seals		Yes No N/A					Total Containers					
Number of Containers												
es												
TAT starts the day received by the lab if received by 4:30pm												

[illegible]

Total	200.7 / 6010		200.8 / 6020:	
Circle Method(s) and Metal(s) to be analyzed	8RCRA TCLP / SPLP 6010	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	13PPM Texas 11	Hg
		Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	8RCRA	1631 / 245.1 / 7470 / 7471

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 Joe Mulla		4/7/21 15:58	2		
3			4		
5			6		

Chain of Custody Record



eurofins

Environment Testing
America

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:					
Client Contact:		Phone:	Simmons, Debbie		880-797.1					
Shipping/Receiving		E-Mail:	debbie.simmons@eurofins.com	State of Origin:	Page 1 of 1					
Company:		Eurofins Xenco		Accreditations Required (See note)	Job #:					
Address:		Due Date Requested:	NEIAP - Texas		880-1120-1					
City:		4/13/2021	Analysis Requested							
State:		TX, 79922								
Phone:		915-585-3443(Tel)								
Email:		WO #:								
Project Name:		Project #:								
Dollarhide		88000225								
Site:		SSOW#:								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Soil, O=Organic, B=Biological, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2640C, Calcd	Total Number of containers	Special Instructions/Note:
MMW-32-W-210704 (880-1120-1)	4/7/21	13:00	Mountain	Water			X		1	
MMW-33-W-210704 (880-1120-2)	4/7/21	12:45	Mountain	Water			X		1	
MMW-34-W-210704 (880-1120-3)	4/7/21	12:30	Mountain	Water			X		1	
MMW-32-WD-210704 (880-1120-4)	4/7/21		Mountain	Water			X		1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontracted laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.										
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QAC Requirements:										
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:						
Relinquished by: <i>[Signature]</i>		4/8/21 1700		Company	Received by: <i>[Signature]</i>	4/9/21 10:30		Company		
Relinquished by:		Date/Time:		Company	Received by:	Date/Time:		Company		
Relinquished by:		Date/Time:		Company	Received by:	Date/Time:		Company		
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:						

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-1120-1

Login Number: 1120

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-1120-1

Login Number: 1120

List Number: 2

Creator: Aparicio, Niria

List Source: Eurofins El Paso

List Creation: 04/09/21 12:24 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Certificate of Analysis Summary 684035



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Fri 01.08.2021 16:24
 Report Date: 01.29.2021 19:04
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684035-001	684035-002	684035-003	684035-004	684035-005	684035-006
	Field Id:	MW-29-W-210801	MW-28-W-210801	58-B-3-MW-W-210801	NM-MW-9-W-210801	NM-MW-14-W-210801	Smith Residence-W-2108
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	01.08.2021 13:30	01.08.2021 13:45	01.08.2021 14:00	01.08.2021 14:15	01.08.2021 14:30	01.08.2021 14:45
Inorganic Anions by EPA 300/300.1	Extracted:	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00
	Analyzed:	01.12.2021 11:15	01.12.2021 11:20	01.12.2021 11:26	01.12.2021 11:31	01.12.2021 11:46	01.12.2021 11:52
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		550 5.00	3940 25.0	1630 25.0	242 2.50	95.2 10.0	1040 10.0
TDS by SM2540C	Extracted:						
	Analyzed:	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 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		1280 5.00	6840 5.00	2800 5.00	789 5.00	455 5.00	1940 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684035



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Fri 01.08.2021 16:24
 Report Date: 01.29.2021 19:04
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684035-007	684035-008				
	Field Id:	Wilson Ranch Well-W-21	NM-MW-10-W-210801				
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER				
	Sampled:	01.08.2021 12:15	01.08.2021 11:45				
Inorganic Anions by EPA 300/300.1	Extracted:	01.12.2021 10:00	01.12.2021 10:00				
	Analyzed:	01.12.2021 11:57	01.12.2021 12:02				
	Units/RL:	mg/L RL	mg/L RL				
Chloride		526 5.00	336 5.00				
TDS by SM2540C	Extracted:						
	Analyzed:	01.11.2021 17:00	01.11.2021 17:00				
	Units/RL:	mg/L RL	mg/L RL				
Total Dissolved Solids		2070 5.00	1700 5.00				

BRL - Below Reporting Limit

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

Analytical Report 684035

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

01.29.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.29.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684035**
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) 684035. 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. 684035 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 684035****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-29-W-210801	W	01.08.2021 13:30		684035-001
MW-28-W-210801	W	01.08.2021 13:45		684035-002
58-B-3-MW-W-210801	W	01.08.2021 14:00		684035-003
NM-MW-9-W-210801	W	01.08.2021 14:15		684035-004
NM-MW-14-W-210801	W	01.08.2021 14:30		684035-005
Smith Residence-W-210801	W	01.08.2021 14:45		684035-006
Wilson Ranch Well-W-210801	W	01.08.2021 12:15		684035-007
NM-MW-10-W-210801	W	01.08.2021 11:45		684035-008



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 684035

Report Date: 01.29.2021
Date Received: 01.08.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-29-W-210801** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-001 Date Collected: 01.08.2021 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	550	5.00	0.210	mg/L	01.12.2021 11:15		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1280	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-28-W-210801** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-002 Date Collected: 01.08.2021 13:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3940	25.0	1.05	mg/L	01.12.2021 11:20		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6840	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: 58-B-3-MW-W-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-003

Date Collected: 01.08.2021 14:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1630	25.0	1.05	mg/L	01.12.2021 11:26		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2800	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-9-W-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-004

Date Collected: 01.08.2021 14:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	242	2.50	0.105	mg/L	01.12.2021 11:31		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	789	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-14-W-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-005

Date Collected: 01.08.2021 14:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	95.2	10.0	0.421	mg/L	01.12.2021 11:46		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	455	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **Smith Residence-W-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-006

Date Collected: 01.08.2021 14:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1040	10.0	0.421	mg/L	01.12.2021 11:52		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1940	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **Wilson Ranch Well-W-210801** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-007 Date Collected: 01.08.2021 12:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	526	5.00	0.210	mg/L	01.12.2021 11:57		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2070	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684035

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-10-W-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684035-008

Date Collected: 01.08.2021 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	336	5.00	0.210	mg/L	01.12.2021 12:02		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1700	5.00	5.00	mg/L	01.11.2021 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: 3147621

Matrix: Water

Prep Method: E300P

Date Prep: 01.12.2021

MB Sample Id: 7718951-1-BLK

LCS Sample Id: 7718951-1-BKS

LCSD Sample Id: 7718951-1-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	23.9	96	23.9	96	90-110	0	20	mg/L	01.12.2021 10:34	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147621

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684037-002

MS Sample Id: 684037-002 S

MSD Sample Id: 684037-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	659	250	908	100	922	105	90-110	2	20	mg/L	01.12.2021 12:18	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147621

Matrix: Storm Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684189-001

MS Sample Id: 684189-001 S

MSD Sample Id: 684189-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.95	25.0	31.7	103	30.7	99	90-110	3	20	mg/L	01.12.2021 10:59	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Water

MB Sample Id: 3147464-1-BLK

LCS Sample Id: 3147464-1-BKS

LCSD Sample Id: 3147464-1-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	1000	100	1010	101	80-120	1	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Ground Water

Parent Sample Id: 684035-001

MD Sample Id: 684035-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1280	1220	5	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Ground Water

Parent Sample Id: 684037-003

MD Sample Id: 684037-003 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	680	688	1	10	mg/L	01.11.2021 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

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) 233-3927
Hobbs, NM (575) 392-7550

Work Order No: 684022

Page ____ of ____
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 & edsds@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:	

ANALYSIS REQUEST							Work Order Notes										
Project Name:		Dollarhide	Turn Around														
Project Number:		55270	Routine		☒												
P.O. Number:		34032659	Rush:														
Sampler's Name:		Matthew Loughlin			Due Date:												
SAMPLE RECEIPT								Temp Blank:		Yes		No	Well Ice:		Fes		No
Temperature (°C):								36		Thermometer ID							
Received In tact:								☒ Yes ☐ No		ID#							
Cooler Custody Seals:								☒ Yes ☐ No		Correction Factor:							
Sample Custody Seals:								☒ Yes ☐ No		Total Containers:							
Sample Identification				Matrix		Date Sampled		Time Sampled		Depth		Number of Containers					
MW-29-W-210801				GW		01/08/21		1330		-		1					
MW-28-W-210801				GW		01/08/21		1345		-		1 X					
58-B-3-MW-W-210801				GW		01/08/21		1400		-		1 X					
NM-MW-9-W-210801				GW		01/08/21		1415		-		1 X					
NM-MW-14-W-210801				GW		01/08/21		1430		-		1 X					
Smith Residence-W-210801				GW		01/08/21		1445		-		1 X					
Wilson Ranch Well-W-210801				GW		01/08/21		1215		-		1 X					
NM-MW-10-W-210801				GW		01/08/21		1145		-		1 X					
TAT starts the day received by the lab, if received by 4:30pm												Sample Comments					

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP/SPLP 6010:	8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U																

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.

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 01.08.2021 04.24.00 PM

Work Order #: 684035

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

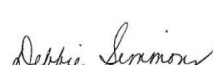
Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#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: JKR

PH Device/Lot#: 10BDH1991

Checklist completed by:	 Brianna Teel	Date: 01.08.2021
Checklist reviewed by:	 Debbie Simmons	Date: 01.16.2021

Certificate of Analysis Summary 684037



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Fri 01.08.2021 16:24

Report Date: 01.20.2021 17:55

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684037-001	684037-002	684037-003	684037-004	684037-005	684037-006
	Field Id:	NM-MW-1-W-210701	NM-MW-2-W-210701	NM-MW-3-W-210701	NM-MW-4-W-210701	NM-MW-5-W-210701	NM-MW-6-W-210701
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	01.07.2021 13:00	01.07.2021 13:30	01.07.2021 14:00	01.07.2021 15:30	01.07.2021 12:30	01.07.2021 12:00
Inorganic Anions by EPA 300/300.1	Extracted:	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00
	Analyzed:	01.12.2021 12:07	01.12.2021 12:12	01.12.2021 12:28	01.12.2021 12:33	01.12.2021 12:49	01.12.2021 12:54
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		273 5.00	659 5.00	264 2.50	44.4 2.50	146 5.00	142 2.50
TDS by SM2540C	Extracted:						
	Analyzed:	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 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		1410 5.00	1230 5.00	680 5.00	435 5.00	1260 5.00	811 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684037



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Fri 01.08.2021 16:24
 Report Date: 01.20.2021 17:55
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684037-007	684037-008	684037-009	684037-010		
	Field Id:	NM-MW-7-W-210701	NM-MW-8-W-210701	RRR-Ranch Windmill-W	RRR-Ranch Windmill-W		
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER		
	Sampled:	01.07.2021 14:30	01.07.2021 16:00	01.07.2021 15:00	01.07.2021 15:00		
Inorganic Anions by EPA 300/300.1	Extracted:	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00		
	Analyzed:	01.12.2021 12:59	01.12.2021 13:04	01.12.2021 13:09	01.12.2021 13:15		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Chloride		2170 25.0	6110 25.0	2030 25.0	1930 25.0		
TDS by SM2540C	Extracted:						
	Analyzed:	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:00		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Total Dissolved Solids		4550 5.00	11200 5.00	3780 5.00	3830 5.00		

BRL - Below Reporting Limit

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

Analytical Report 684037

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

01.20.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.20.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684037**
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) 684037. 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. 684037 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 684037****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-1-W-210701	W	01.07.2021 13:00		684037-001
NM-MW-2-W-210701	W	01.07.2021 13:30		684037-002
NM-MW-3-W-210701	W	01.07.2021 14:00		684037-003
NM-MW-4-W-210701	W	01.07.2021 15:30		684037-004
NM-MW-5-W-210701	W	01.07.2021 12:30		684037-005
NM-MW-6-W-210701	W	01.07.2021 12:00		684037-006
NM-MW-7-W-210701	W	01.07.2021 14:30		684037-007
NM-MW-8-W-210701	W	01.07.2021 16:00		684037-008
RRR-Ranch Windmill-W-210701	W	01.07.2021 15:00		684037-009
RRR-Ranch Windmill-WD-210701	W	01.07.2021 15:00		684037-010



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 684037

Report Date: 01.20.2021
Date Received: 01.08.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-1-W-210701

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-001

Date Collected: 01.07.2021 13:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	273	5.00	0.210	mg/L	01.12.2021 12:07		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1410	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX
Dollarhide

Sample Id: **NM-MW-2-W-210701** Matrix: Ground Water Date Received: 01.08.2021 16:24
Lab Sample Id: 684037-002 Date Collected: 01.07.2021 13:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.12.2021 10:00 % Moisture:
Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	659	5.00	0.210	mg/L	01.12.2021 12:12		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1230	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-3-W-210701**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-003

Date Collected: 01.07.2021 14:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	264	2.50	0.105	mg/L	01.12.2021 12:28		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	680	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-4-W-210701

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-004

Date Collected: 01.07.2021 15:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.4	2.50	0.105	mg/L	01.12.2021 12:33		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	435	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-5-W-210701

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-005

Date Collected: 01.07.2021 12:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	146	5.00	0.210	mg/L	01.12.2021 12:49		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1260	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-6-W-210701

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-006

Date Collected: 01.07.2021 12:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	142	2.50	0.105	mg/L	01.12.2021 12:54		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	811	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-7-W-210701

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-007

Date Collected: 01.07.2021 14:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2170	25.0	1.05	mg/L	01.12.2021 12:59		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4550	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-8-W-210701

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-008

Date Collected: 01.07.2021 16:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6110	25.0	1.05	mg/L	01.12.2021 13:04		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	11200	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **RRR-Ranch Windmill-W-210701** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-009 Date Collected: 01.07.2021 15:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2030	25.0	1.05	mg/L	01.12.2021 13:09		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3780	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684037

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **RRR-Ranch Windmill-WD-210701** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684037-010 Date Collected: 01.07.2021 15:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1930	25.0	1.05	mg/L	01.12.2021 13:15		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3830	5.00	5.00	mg/L	01.11.2021 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: 3147621

Matrix: Water

Prep Method: E300P

Date Prep: 01.12.2021

MB Sample Id: 7718951-1-BLK

LCS Sample Id: 7718951-1-BKS

LCSD Sample Id: 7718951-1-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	23.9	96	23.9	96	90-110	0	20	mg/L	01.12.2021 10:34	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147621

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684037-002

MS Sample Id: 684037-002 S

MSD Sample Id: 684037-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	659	250	908	100	922	105	90-110	2	20	mg/L	01.12.2021 12:18	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147621

Matrix: Storm Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684189-001

MS Sample Id: 684189-001 S

MSD Sample Id: 684189-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.95	25.0	31.7	103	30.7	99	90-110	3	20	mg/L	01.12.2021 10:59	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Water

MB Sample Id: 3147464-1-BLK

LCS Sample Id: 3147464-1-BKS

LCSD Sample Id: 3147464-1-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	1000	100	1010	101	80-120	1	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Ground Water

Parent Sample Id: 684035-001

MD Sample Id: 684035-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1280	1220	5	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Ground Water

Parent Sample Id: 684037-003

MD Sample Id: 684037-003 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	680	688	1	10	mg/L	01.11.2021 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: 1084037

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

Program: UST/ST ☐ 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	☒
Project Number:	55270	Routine	☒
P.O. Number:	34032659	Rush:	
Sampler's Name:	Matthew Lavalita	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	3.0			Thermometer ID:	100	
Received Intact:	Yes	No		Correction Factor:	5	
Cooler Custody Seals:	Yes	No		Total Containers:		
Sample Custody Seals:	Yes	No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST											Work Order Notes	
NM-MW-1-W-210701	GW	01/07/21	1300	-	1	X	X										TAT starts the day received by the lab, if received by 4:30pm
NM-MW-2-W-210701	GW	01/07/21	1330	-	1	X	X										
NM-MW-3-W-210701	GW	01/07/21	1400	-	1	X	X										
NM-MW-4-W-210701	GW	01/07/21	1430	-	1	X	X										
NM-MW-5-W-210701	GW	01/07/21	1230	-	1	X	X										
NM-MW-6-W-210701	GW	01/07/21	1200	-	1	X	X										
NM-MW-7-W-210701	GW	01/07/21	1430	-	1	X	X										
NM-MW-8-W-210701	GW	01/07/21	1600	-	1	X	X										
RRR Ranch Windmill-W-210701	GW	01/07/21	1500	-	1	X	X										
RRR Ranch Windmill-W-210701	GW	01/07/21	1500	-	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
		1-8-21 1622			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 01.08.2021 04.24.00 PM

Work Order #: 684037

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

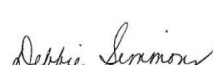
Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#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: JKR

PH Device/Lot#: 10BDH1991

Checklist completed by:	 Brianna Teel	Date: 01.08.2021
Checklist reviewed by:	 Debbie Simmons	Date: 01.16.2021

Certificate of Analysis Summary 684038

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

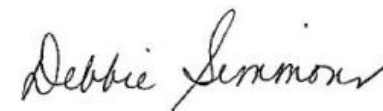
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 01.08.2021 16:24
 Report Date: 01.30.2021 14:12
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684038-001	684038-002	684038-003	684038-004		
	Field Id:	MW-32-W-210801	MW-32-WD-210801	MW-33-W-210801	MW-34-W-210801		
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER		
	Sampled:	01.08.2021 12:45	01.08.2021 12:45	01.08.2021 13:00	01.08.2021 13:15		
Inorganic Anions by EPA 300/300.1	Extracted:	01.12.2021 10:00	01.12.2021 11:30	01.12.2021 11:30	01.12.2021 11:30		
	Analyzed:	01.12.2021 13:20	01.12.2021 11:52	01.12.2021 12:08	01.12.2021 12:13		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Chloride		349 5.00	303 X 5.00	190 5.00	70.8 2.50		
TDS by SM2540C	Extracted:						
	Analyzed:	01.11.2021 17:00	01.11.2021 17:00	01.11.2021 17:45	01.11.2021 17:45		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Total Dissolved Solids		1170 5.00	1170 5.00	1060 5.00	610 5.00		

BRL - Below Reporting Limit

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



Analytical Report 684038

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

01.30.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.30.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684038**
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) 684038. 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. 684038 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 684038****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-32-W-210801	W	01.08.2021 12:45		684038-001
MW-32-WD-210801	W	01.08.2021 12:45		684038-002
MW-33-W-210801	W	01.08.2021 13:00		684038-003
MW-34-W-210801	W	01.08.2021 13:15		684038-004



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 684038

Report Date: 01.30.2021
Date Received: 01.08.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147625 Inorganic Anions by EPA 300/300.1

Lab Sample ID 684038-002 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: 684038-002, -003, -004.

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



Certificate of Analytical Results 684038

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-32-W-210801** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684038-001 Date Collected: 01.08.2021 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147621

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	349	5.00	0.210	mg/L	01.12.2021 13:20		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1170	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684038

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-32-WD-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684038-002

Date Collected: 01.08.2021 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	303	5.00	0.210	mg/L	01.12.2021 11:52	X	10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147464

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1170	5.00	5.00	mg/L	01.11.2021 17:00		1



Certificate of Analytical Results 684038

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-33-W-210801** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684038-003 Date Collected: 01.08.2021 13:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	190	5.00	0.210	mg/L	01.12.2021 12:08		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1060	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684038

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-34-W-210801** Matrix: Ground Water Date Received: 01.08.2021 16:24

Lab Sample Id: 684038-004 Date Collected: 01.08.2021 13:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	70.8	2.50	0.105	mg/L	01.12.2021 12:13		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	610	5.00	5.00	mg/L	01.11.2021 17:45		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: 3147621

Matrix: Water

Prep Method: E300P

Date Prep: 01.12.2021

MB Sample Id: 7718951-1-BLK

LCS Sample Id: 7718951-1-BKS

LCSD Sample Id: 7718951-1-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	23.9	96	23.9	96	90-110	0	20	mg/L	01.12.2021 10:34	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147625

Matrix: Water

Prep Method: E300P

Date Prep: 01.12.2021

MB Sample Id: 7718958-1-BLK

LCS Sample Id: 7718958-1-BKS

LCSD Sample Id: 7718958-1-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	23.8	95	23.9	96	90-110	0	20	mg/L	01.12.2021 11:42	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147621

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684037-002

MS Sample Id: 684037-002 S

MSD Sample Id: 684037-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	659	250	908	100	922	105	90-110	2	20	mg/L	01.12.2021 12:18	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147621

Matrix: Storm Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684189-001

MS Sample Id: 684189-001 S

MSD Sample Id: 684189-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.95	25.0	31.7	103	30.7	99	90-110	3	20	mg/L	01.12.2021 10:59	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147625

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684038-002

MS Sample Id: 684038-002 S

MSD Sample Id: 684038-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	303	250	597	118	607	122	90-110	2	20	mg/L	01.12.2021 11:57	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147625

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684039-008

MS Sample Id: 684039-008 S

MSD Sample Id: 684039-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	430	250	755	130	753	129	90-110	0	20	mg/L	01.12.2021 13:12	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: 3147464

Matrix: Water

MB Sample Id: 3147464-1-BLK

LCS Sample Id: 3147464-1-BKS

LCSD Sample Id: 3147464-1-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	1000	100	1010	101	80-120	1	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147465

Matrix: Water

MB Sample Id: 3147465-1-BLK

LCS Sample Id: 3147465-1-BKS

LCSD Sample Id: 3147465-1-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	999	100	998	100	80-120	0	10	mg/L	01.11.2021 17:45	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Ground Water

Parent Sample Id: 684035-001

MD Sample Id: 684035-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1280	1220	5	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147464

Matrix: Ground Water

Parent Sample Id: 684037-003

MD Sample Id: 684037-003 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	680	688	1	10	mg/L	01.11.2021 17:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147465

Matrix: Ground Water

Parent Sample Id: 684038-003

MD Sample Id: 684038-003 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1060	1070	1	10	mg/L	01.11.2021 17:45	

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: 684038

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)
Hobbs, NM (575-392-7550)

Page 7 of 7
www.xenco.com

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apinvoices-340@ghd.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@ghd.com & Christopher.Knight@ghd.com & Brittany.White@ghd.com & edsds@ghd.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 Lavachlin	Due Date:

SAMPLE RECEIPT			
Temperature (°C):	34	Temp Blank:	Yes No
Received intact:	Yes No		Wet Ice: Yes No
Cooler Custody Seals:	Yes No	Thermometer ID	188
Sample Custody Seals:	Yes No	Correction Factor:	5
		Total Containers:	

[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 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 Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xencro 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 Xencro. A minimum charge of \$75.00 will be applied to each project and a charge of \$8 for each sample submitted to Xencro, 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 		1-8-27 16:29			
3 					
5					

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 01.08.2021 04.24.00 PM

Work Order #: 684038

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

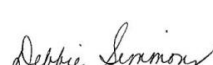
Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#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: JKR

PH Device/Lot#: 10BDH1991

Checklist completed by:	 Brianna Teel	Date: 01.08.2021
Checklist reviewed by:	 Debbie Simmons	Date: 01.16.2021

Certificate of Analysis Summary 684039



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Fri 01.08.2021 16:24

Report Date: 01.20.2021 17:56

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684039-001	684039-002	684039-003	684039-004	684039-005	684039-006
	Field Id:	NM-MW-15-W-210801	NM-MW-11-W-210801	NM-MW-17-W-210801	NM-MW-13-W-210801	NM-MW-20-W-210801	NM-MW-21-W-210801
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	01.08.2021 10:30	01.08.2021 10:15	01.08.2021 10:45	01.08.2021 10:00	01.08.2021 11:30	01.08.2021 11:15
Inorganic Anions by EPA 300/300.1	Extracted:	01.12.2021 11:30	01.12.2021 11:30	01.12.2021 11:30	01.12.2021 11:30	01.12.2021 11:30	01.12.2021 11:30
	Analyzed:	01.12.2021 12:19	01.12.2021 12:24	01.12.2021 12:40	01.12.2021 12:45	01.12.2021 12:51	01.12.2021 12:56
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		56.4 2.50	152 10.0	182 5.00	185 5.00	23.9 2.50	29.0 2.50
TDS by SM2540C	Extracted:						
	Analyzed:	01.11.2021 17:45	01.11.2021 17:45	01.11.2021 17:45	01.11.2021 17:45	01.11.2021 17:45	01.11.2021 17:45
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		507 5.00	2030 5.00	971 5.00	1110 5.00	381 5.00	541 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684039

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

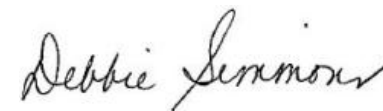
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Fri 01.08.2021 16:24
 Report Date: 01.20.2021 17:56
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id: 684039-007 Field Id: NM-MW-13-DW-21080 Depth: Matrix: GROUND WATER Sampled: 01.08.2021 00:00	684039-008 NM-MW-12-W-210801 GROUND WATER 01.08.2021 12:00				
Inorganic Anions by EPA 300/300.1	Extracted: 01.12.2021 11:30 Analyzed: 01.12.2021 13:01 Units/RL: mg/L RL	01.12.2021 11:30 01.12.2021 13:07 mg/L RL				
Chloride	186 5.00	430 X 5.00				
TDS by SM2540C	Extracted: Analyzed: 01.11.2021 17:45 Units/RL: mg/L RL	01.11.2021 17:45 mg/L RL				
Total Dissolved Solids	1130 5.00	1160 5.00				

BRL - Below Reporting Limit

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



Analytical Report 684039

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

01.20.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.20.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684039**
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) 684039. 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. 684039 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 684039****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NM-MW-15-W-210801	W	01.08.2021 10:30		684039-001
NM-MW-11-W-210801	W	01.08.2021 10:15		684039-002
NM-MW-17-W-210801	W	01.08.2021 10:45		684039-003
NM-MW-13-W-210801	W	01.08.2021 10:00		684039-004
NM-MW-20-W-210801	W	01.08.2021 11:30		684039-005
NM-MW-21-W-210801	W	01.08.2021 11:15		684039-006
NM-MW-13-DW-210801	W	01.08.2021 00:00		684039-007
NM-MW-12-W-210801	W	01.08.2021 12:00		684039-008



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 684039

Report Date: 01.20.2021
Date Received: 01.08.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147625 Inorganic Anions by EPA 300/300.1

Lab Sample ID 684039-008 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: 684039-001, -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 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-15-W-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-001

Date Collected: 01.08.2021 10:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.4	2.50	0.105	mg/L	01.12.2021 12:19		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	507	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-11-W-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-002

Date Collected: 01.08.2021 10:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	152	10.0	0.421	mg/L	01.12.2021 12:24		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2030	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-17-W-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-003

Date Collected: 01.08.2021 10:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	182	5.00	0.210	mg/L	01.12.2021 12:40		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	971	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-13-W-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-004

Date Collected: 01.08.2021 10:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	185	5.00	0.210	mg/L	01.12.2021 12:45		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1110	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-20-W-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-005

Date Collected: 01.08.2021 11:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.9	2.50	0.105	mg/L	01.12.2021 12:51		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	381	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-21-W-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-006

Date Collected: 01.08.2021 11:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.0	2.50	0.105	mg/L	01.12.2021 12:56		5

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	541	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: NM-MW-13-DW-210801

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-007

Date Collected: 01.08.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	186	5.00	0.210	mg/L	01.12.2021 13:01		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1130	5.00	5.00	mg/L	01.11.2021 17:45		1



Certificate of Analytical Results 684039

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **NM-MW-12-W-210801**

Matrix: Ground Water

Date Received: 01.08.2021 16:24

Lab Sample Id: 684039-008

Date Collected: 01.08.2021 12:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:30

% Moisture:

Seq Number: 3147625

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	430	5.00	0.210	mg/L	01.12.2021 13:07	X	10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147465

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1160	5.00	5.00	mg/L	01.11.2021 17:45		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: 3147625

Matrix: Water

Prep Method: E300P

Date Prep: 01.12.2021

MB Sample Id: 7718958-1-BLK

LCS Sample Id: 7718958-1-BKS

LCSD Sample Id: 7718958-1-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	23.8	95	23.9	96	90-110	0	20	mg/L	01.12.2021 11:42	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147625

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684038-002

MS Sample Id: 684038-002 S

MSD Sample Id: 684038-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	303	250	597	118	607	122	90-110	2	20	mg/L	01.12.2021 11:57	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147625

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.12.2021

Parent Sample Id: 684039-008

MS Sample Id: 684039-008 S

MSD Sample Id: 684039-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	430	250	755	130	753	129	90-110	0	20	mg/L	01.12.2021 13:12	X

Analytical Method: TDS by SM2540C

Seq Number: 3147465

Matrix: Water

MB Sample Id: 3147465-1-BLK

LCS Sample Id: 3147465-1-BKS

LCSD Sample Id: 3147465-1-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	999	100	998	100	80-120	0	10	mg/L	01.11.2021 17:45	

Analytical Method: TDS by SM2540C

Seq Number: 3147465

Matrix: Ground Water

Parent Sample Id: 684038-003

MD Sample Id: 684038-003 D

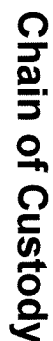
Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1060	1070	1	10	mg/L	01.11.2021 17:45	

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



Work Order No: 189039

Page 7 of 10
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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 Langshill	Due Date:								

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	(X) Yes	No
Temperature (°C):	3.6.			Thermometer ID		
Received intact:	(X) Yes	No		IPV		
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	.5	
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Number of Containers

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

[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>		ICLP / SLP	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
		1-18-10 2:12			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 01.08.2021 04.24.00 PM

Work Order #: 684039

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)?	3.6
#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: JKR

PH Device/Lot#: 10BDH1991

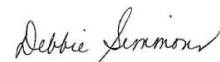
Checklist completed by:



Brianna Teel

Date: 01.08.2021

Checklist reviewed by:



Debbie Simmons

Date: 01.16.2021

Certificate of Analysis Summary 684283



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 08:38**Report Date:** 01.29.2021 19:08**Project Manager:** Debbie Simmons

<i>Analysis Requested</i>	<i>Lab Id:</i>	684283-001	684283-002	684283-003	684283-004	684283-005	684283-006
	<i>Field Id:</i>	MW-3-W-211101	MW-4-W-211101	MW-5-W-211101	MW-6-W-211101	MW-10-W-211101	MW-11-W-211101
	<i>Depth:</i>						
	<i>Matrix:</i>	WATER	WATER	WATER	WATER	WATER	WATER
	<i>Sampled:</i>	01.11.2021 11:50	01.11.2021 11:30	01.11.2021 14:15	01.11.2021 14:25	01.11.2021 13:35	01.11.2021 14:35
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30
	<i>Analyzed:</i>	01.13.2021 17:19	01.13.2021 17:35	01.13.2021 17:41	01.13.2021 17:46	01.13.2021 17:51	01.13.2021 18:07
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		605 5.00	327 5.00	252 5.00	380 5.00	3880 25.0	7290 50.0
TDS by SM2540C	<i>Extracted:</i>						
	<i>Analyzed:</i>	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18
	<i>Units/RL:</i>	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		1470 5.00	911 5.00	975 5.00	1580 5.00	8180 5.00	11900 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684283



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 08:38

Report Date: 01.29.2021 19:08

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684283-007	684283-008	684283-009	684283-010	684283-011	684283-012
	Field Id:	MW-12-W-211101	MW-13-W-211101	MW-13-WD-211101	MW-14-W-211101	MW-15-W-211101	MW-16-W-211101
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	01.11.2021 15:00	01.11.2021 11:20	01.11.2021 11:20	01.11.2021 12:10	01.11.2021 12:20	01.11.2021 12:35
Inorganic Anions by EPA 300/300.1	Extracted:	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30
	Analyzed:	01.13.2021 18:13	01.13.2021 18:18	01.13.2021 18:23	01.13.2021 18:28	01.13.2021 18:34	01.13.2021 18:50
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		13300 50.0	1270 25.0	1600 25.0	1260 25.0	902 X 10.0	403 5.00
TDS by SM2540C	Extracted:						
	Analyzed:	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		22300 5.00	4180 5.00	4260 5.00	3210 5.00	1880 5.00	1050 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684283



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 08:38

Report Date: 01.29.2021 19:08

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684283-013	684283-014	684283-015	684283-016	684283-017	684283-018
	Field Id:	MW-17-W-211101	MW-19-W-211101	MW-20-W-211101	MW-21-W-211101	MW-22-W-211101	MW-23-W-211101
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	01.11.2021 10:45	01.11.2021 13:00	01.11.2021 13:15	01.11.2021 12:45	01.11.2021 11:00	01.11.2021 10:55
Inorganic Anions by EPA 300/300.1	Extracted:	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30
	Analyzed:	01.13.2021 18:55	01.13.2021 19:11	01.13.2021 19:16	01.13.2021 19:22	01.13.2021 19:27	01.13.2021 19:32
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		7680 50.0	7350 50.0	1130 10.0	3050 25.0	11000 50.0	4160 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18	01.13.2021 12:18
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		4200 5.00	12500 5.00	2460 5.00	10100 5.00	17600 5.00	8970 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684283



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 08:38

Report Date: 01.29.2021 19:08

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684283-019	684283-020	684283-021	684283-022	684283-023	684283-024
	Field Id:	MW-24-W-211101	MW-25-W-211101	MW-26-W-211101	MW-27-W-211101	MW-30-W-211101	MW-31-W-211101
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	01.11.2021 13:45	01.11.2021 15:10	01.11.2021 13:10	01.11.2021 13:30	01.11.2021 11:10	01.11.2021 14:55
Inorganic Anions by EPA 300/300.1	Extracted:	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15
	Analyzed:	01.13.2021 19:38	01.13.2021 19:43	01.13.2021 11:47	01.13.2021 12:12	01.13.2021 12:17	01.13.2021 12:22
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		1680 25.0	23900 100	1400 25.0	2210 25.0	2100 25.0	9500 50.0
TDS by SM2540C	Extracted:						
	Analyzed:	01.13.2021 12:18	01.13.2021 12:18	01.12.2021 10:16	01.12.2021 10:16	01.12.2021 10:16	01.12.2021 10:16
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		8690 5.00	36600 5.00	3370 5.00	4160 5.00	4050 5.00	17100 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684283

GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

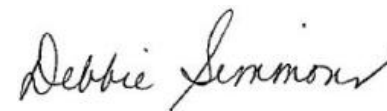
Project Id: 055270
 Contact: Nick Casten
 Project Location: New Mexico

Date Received in Lab: Tue 01.12.2021 08:38
 Report Date: 01.29.2021 19:08
 Project Manager: Debbie Simmons

Analysis Requested	Lab Id: 684283-025 Field Id: Livermore-W-211101 Depth: Matrix: WATER Sampled: 01.11.2021 14:05	684283-026 MW-18-W-211101 WATER 01.11.2021 13:55				
Inorganic Anions by EPA 300/300.1	Extracted: 01.13.2021 11:15 Analyzed: 01.13.2021 12:27 Units/RL: mg/L RL	01.14.2021 08:30 01.15.2021 09:13 mg/L RL				
Chloride	2200 25.0	21000 100				
TDS by SM2540C	Extracted: Analyzed: 01.12.2021 10:16 Units/RL: mg/L RL	01.12.2021 10:16 mg/L RL				
Total Dissolved Solids	4290 5.00	35800 5.00				

BRL - Below Reporting Limit

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



Analytical Report 684283

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

01.29.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.29.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684283**
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) 684283. 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. 684283 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 684283

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3-W-211101	W	01.11.2021 11:50		684283-001
MW-4-W-211101	W	01.11.2021 11:30		684283-002
MW-5-W-211101	W	01.11.2021 14:15		684283-003
MW-6-W-211101	W	01.11.2021 14:25		684283-004
MW-10-W-211101	W	01.11.2021 13:35		684283-005
MW-11-W-211101	W	01.11.2021 14:35		684283-006
MW-12-W-211101	W	01.11.2021 15:00		684283-007
MW-13-W-211101	W	01.11.2021 11:20		684283-008
MW-13-WD-211101	W	01.11.2021 11:20		684283-009
MW-14-W-211101	W	01.11.2021 12:10		684283-010
MW-15-W-211101	W	01.11.2021 12:20		684283-011
MW-16-W-211101	W	01.11.2021 12:35		684283-012
MW-17-W-211101	W	01.11.2021 10:45		684283-013
MW-19-W-211101	W	01.11.2021 13:00		684283-014
MW-20-W-211101	W	01.11.2021 13:15		684283-015
MW-21-W-211101	W	01.11.2021 12:45		684283-016
MW-22-W-211101	W	01.11.2021 11:00		684283-017
MW-23-W-211101	W	01.11.2021 10:55		684283-018
MW-24-W-211101	W	01.11.2021 13:45		684283-019
MW-25-W-211101	W	01.11.2021 15:10		684283-020
MW-26-W-211101	W	01.11.2021 13:10		684283-021
MW-27-W-211101	W	01.11.2021 13:30		684283-022
MW-30-W-211101	W	01.11.2021 11:10		684283-023
MW-31-W-211101	W	01.11.2021 14:55		684283-024
Livermore-W-211101	W	01.11.2021 14:05		684283-025
MW-18-W-211101	W	01.11.2021 13:55		684283-026

**CASE NARRATIVE****Client Name: GHD Services, INC- Midland****Project Name: Dollarhide**

Project ID: 055270
Work Order Number(s): 684283

Report Date: 01.29.2021
Date Received: 01.12.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147777 Inorganic Anions by EPA 300/300.1

Lab Sample ID 684283-011 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: 684283-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.

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



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-3-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
 Lab Sample Id: 684283-001 Date Collected: 01.11.2021 11:50

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

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	605	5.00	0.210	mg/L	01.13.2021 17:19		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1470	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX
Dollarhide

Sample Id: **MW-4-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-002 Date Collected: 01.11.2021 11:30
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	327	5.00	0.210	mg/L	01.13.2021 17:35		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	911	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX
Dollarhide

Sample Id: **MW-5-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-003 Date Collected: 01.11.2021 14:15
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	252	5.00	0.210	mg/L	01.13.2021 17:41		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	975	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX
Dollarhide

Sample Id: **MW-6-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-004 Date Collected: 01.11.2021 14:25
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	380	5.00	0.210	mg/L	01.13.2021 17:46		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3147468

% Moisture:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1580	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-10-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-005 Date Collected: 01.11.2021 13:35

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3880	25.0	1.05	mg/L	01.13.2021 17:51		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8180	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-11-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-006 Date Collected: 01.11.2021 14:35

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7290	50.0	2.10	mg/L	01.13.2021 18:07		100

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	11900	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-12-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-007 Date Collected: 01.11.2021 15:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13300	50.0	2.10	mg/L	01.13.2021 18:13		100

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	22300	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-13-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-008 Date Collected: 01.11.2021 11:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1270	25.0	1.05	mg/L	01.13.2021 18:18		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4180	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-13-WD-211101**

Matrix: Water

Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-009

Date Collected: 01.11.2021 11:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1600	25.0	1.05	mg/L	01.13.2021 18:23		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4260	5.00	5.00	mg/L	01.13.2021 12:18		1



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Sample Id: **MW-14-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-010 Date Collected: 01.11.2021 12:10
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1260	25.0	1.05	mg/L	01.13.2021 18:28		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3210	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-15-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-011 Date Collected: 01.11.2021 12:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	902	10.0	0.421	mg/L	01.13.2021 18:34	X	20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1880	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX
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Sample Id: **MW-16-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-012 Date Collected: 01.11.2021 12:35
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	403	5.00	0.210	mg/L	01.13.2021 18:50		10

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1050	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX
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Sample Id: **MW-17-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-013 Date Collected: 01.11.2021 10:45
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7680	50.0	2.10	mg/L	01.13.2021 18:55		100

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4200	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-19-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-014 Date Collected: 01.11.2021 13:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7350	50.0	2.10	mg/L	01.13.2021 19:11		100

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	12500	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-20-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-015 Date Collected: 01.11.2021 13:15

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	10.0	0.421	mg/L	01.13.2021 19:16		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2460	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX
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Sample Id: **MW-21-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-016 Date Collected: 01.11.2021 12:45
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3050	25.0	1.05	mg/L	01.13.2021 19:22		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	10100	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-22-W-211101**

Matrix: Water

Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-017

Date Collected: 01.11.2021 11:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11000	50.0	2.10	mg/L	01.13.2021 19:27		100

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	17600	5.00	5.00	mg/L	01.13.2021 12:18		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-23-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-018 Date Collected: 01.11.2021 10:55

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 14:30

% Moisture:

Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4160	25.0	1.05	mg/L	01.13.2021 19:32		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8970	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX
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Sample Id: **MW-24-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-019 Date Collected: 01.11.2021 13:45
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1680	25.0	1.05	mg/L	01.13.2021 19:38		50

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC % Moisture:
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8690	5.00	5.00	mg/L	01.13.2021 12:18		1



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GHD Services, INC- Midland, Midland, TX
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Sample Id: **MW-25-W-211101** Matrix: Water Date Received: 01.12.2021 08:38
Lab Sample Id: 684283-020 Date Collected: 01.11.2021 15:10
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: CHE
Analyst: CHE Date Prep: 01.13.2021 14:30 % Moisture:
Seq Number: 3147777

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23900	100	4.21	mg/L	01.13.2021 19:43		200

Analytical Method: TDS by SM2540C
Tech: SPC
Analyst: SPC
Seq Number: 3147468

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	36600	5.00	5.00	mg/L	01.13.2021 12:18		1



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Sample Id: **MW-26-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-021 Date Collected: 01.11.2021 13:10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1400	25.0	1.05	mg/L	01.13.2021 11:47		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3370	5.00	5.00	mg/L	01.12.2021 10:16		1



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Sample Id: **MW-27-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-022 Date Collected: 01.11.2021 13:30

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2210	25.0	1.05	mg/L	01.13.2021 12:12		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4160	5.00	5.00	mg/L	01.12.2021 10:16		1



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GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-30-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-023 Date Collected: 01.11.2021 11:10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2100	25.0	1.05	mg/L	01.13.2021 12:17		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4050	5.00	5.00	mg/L	01.12.2021 10:16		1



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Sample Id: **MW-31-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-024 Date Collected: 01.11.2021 14:55

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9500	50.0	2.10	mg/L	01.13.2021 12:22		100

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	17100	5.00	5.00	mg/L	01.12.2021 10:16		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

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Sample Id: **Livermore-W-211101**

Matrix: Water

Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-025

Date Collected: 01.11.2021 14:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2200	25.0	1.05	mg/L	01.13.2021 12:27		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4290	5.00	5.00	mg/L	01.12.2021 10:16		1



Certificate of Analytical Results 684283

GHD Services, INC- Midland, Midland, TX

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Sample Id: **MW-18-W-211101** Matrix: Water Date Received: 01.12.2021 08:38

Lab Sample Id: 684283-026 Date Collected: 01.11.2021 13:55

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.14.2021 08:30

% Moisture:

Seq Number: 3147887

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21000	100	4.21	mg/L	01.15.2021 09:13		200

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	35800	5.00	5.00	mg/L	01.12.2021 10:16		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: 3147770

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

MB Sample Id: 7719059-1-BLK

LCS Sample Id: 7719059-1-BKS

LCSD Sample Id: 7719059-1-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	23.9	96	23.8	95	90-110	0	20	mg/L	01.13.2021 11:31	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147777

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

MB Sample Id: 7719083-1-BLK

LCS Sample Id: 7719083-1-BKS

LCSD Sample Id: 7719083-1-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	24.3	97	24.2	97	90-110	0	20	mg/L	01.13.2021 17:09	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147887

Matrix: Water

Prep Method: E300P

Date Prep: 01.14.2021

MB Sample Id: 7719174-1-BLK

LCS Sample Id: 7719174-1-BKS

LCSD Sample Id: 7719174-1-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	25.4	102	25.4	102	90-110	0	20	mg/L	01.14.2021 15:45	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147770

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684283-021

MS Sample Id: 684283-021 S

MSD Sample Id: 684283-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1400	1250	2660	101	2660	101	90-110	0	20	mg/L	01.13.2021 11:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147770

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684389-005

MS Sample Id: 684389-005 S

MSD Sample Id: 684389-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4870	1250	6140	102	6140	102	90-110	0	20	mg/L	01.13.2021 14:14	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147777

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684283-001

MS Sample Id: 684283-001 S

MSD Sample Id: 684283-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	605	250	854	100	852	99	90-110	0	20	mg/L	01.13.2021 17:25	

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: 3147777

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684283-011

MS Sample Id: 684283-011 S

MSD Sample Id: 684283-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	902	500	1560	132	1570	134	90-110	1	20	mg/L	01.13.2021 18:39	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147887

Matrix: Drinking Water

Prep Method: E300P

Date Prep: 01.14.2021

Parent Sample Id: 684579-001

MS Sample Id: 684579-001 S

MSD Sample Id: 684579-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.68	25.0	32.1	102	32.1	102	90-110	0	20	mg/L	01.14.2021 16:23	

Analytical Method: TDS by SM2540C

Seq Number: 3147468

Matrix: Water

MB Sample Id: 3147468-1-BLK

LCS Sample Id: 3147468-1-BKS

LCSD Sample Id: 3147468-1-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	1000	100	1000	100	80-120	0	10	mg/L	01.13.2021 12:18	

Analytical Method: TDS by SM2540C

Seq Number: 3147470

Matrix: Water

MB Sample Id: 3147470-1-BLK

LCS Sample Id: 3147470-1-BKS

LCSD Sample Id: 3147470-1-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	992	99	1010	101	80-120	2	10	mg/L	01.12.2021 10:16	

Analytical Method: TDS by SM2540C

Seq Number: 3147468

Matrix: Water

Parent Sample Id: 684283-001

MD Sample Id: 684283-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1470	1470	0	10	mg/L	01.13.2021 12:18	

Analytical Method: TDS by SM2540C

Seq Number: 3147468

Matrix: Water

Parent Sample Id: 684283-011

MD Sample Id: 684283-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1880	1900	1	10	mg/L	01.13.2021 12:18	

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: 3147470

Matrix: Water

Parent Sample Id: 684283-021

MD Sample Id: 684283-021 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	3370	3740	10	10	mg/L	01.12.2021 10:16	

Analytical Method: TDS by SM2540C

Seq Number: 3147470

Matrix: Ground Water

Parent Sample Id: 684389-004

MD Sample Id: 684389-004 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8640	8600	0	10	mg/L	01.13.2021 14:30	

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



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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) 620-2000

Chain of Custody

Work Order No:

1081283

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair- Apivvoices-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: ☐ 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	☒	ANALYSIS REQUEST	Work Order Notes
Project Number:	55270	Routine	☒		
P.O. Number:	34032659	Rush:			
Sampler's Name:	Matthew Lamahlin	Due Date:			
SAMPLE RECEIPT				Number of Containers	
Temperature (°C):	4.8	Temp Blank:	Yes No	Chlorides	TDS
Received Intact:	(Yes) No	Thermometer ID	188		
Cooler Custody Seals:	Yes No (MA)	Correction Factor:	.5		
Sample Custody Seals:	Yes No (MA)	Total Containers:			
Sample Identification				Sample Comments	
Matrix	Date Sampled	Time Sampled	Depth		
MW-3-W-21101	GW	01/11/21	150	1	X
MW-4-W-21101	GW	01/11/21	130	1	X
MW-5-W-21101	GW	01/11/21	145	1	X
MW-6-W-21101	GW	01/11/21	1425	1	X
MW-10-W-21101	GW	01/11/21	1335	1	X
MW-11-W-21101	GW	01/11/21	1435	1	X
MW-12-W-21101	GW	01/11/21	1500	1	X
MW-13-W-21101	GW	01/11/21	1130	1	X
MW-13-W-21101	GW	01/11/21	1130	1	X
MW-14-W-21101	GW	01/11/21	1210	1	X

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	AI 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
		10-21-21 1538			



Chain of Custody

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Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

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Page 2 of 3

Work Order No: 284203

Project Manager:	Nick Casten	Bill to: (if different)	Gina Blair, Apirivices-340@ghd.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@ghd.com & Christopher.Knight@ghd.com & Brittany.White@ghd.com & eds@ghd.com

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level: I ☐ 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		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	18	Thermometer ID					
Received Inact:	(Yes) No	Correction Factor:	1.02				
Cooler Custody Seals:	Yes No	Total Containers:	5				
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-15-W-21101	GW	01/11/21	1230	-	1	X	X		
MW-16-W-21101	GW	01/11/21	1335	-	1	X	X		
MW-17-W-21101	GW	01/11/21	1045	-	1	X	X		
MW-19-W-21101	GW	01/11/21	1300	-	1	X	X		
MW-20-W-21101	GW	01/11/21	1315	-	1	X	X		
MW-21-W-21101	GW	01/11/21	1245	-	1	X	X		
MW-23-W-21101	GW	01/11/21	1100	-	1	X	X		
MW-23-W-21101	GW	01/11/21	1055	-	1	X	X		
MW-24-W-21101	GW	01/11/21	1345	-	1	X	X		
MW-25-W-21101	GW	01/11/21	1510	-	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
1		1-10-21 838	2		
3			4		
5			6		



Chain of Custody

Work Order No:

1084292

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 575-3927
Hobbs, NM (575) 392-7550

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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:	

Project Name:	Dollarhide	Turn Around
Project Number:	55270	Routine ☒
P.O. Number:	34032659	Rush:
Sampler's Name:	Matthew Langhite	Due Date:

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	4.8						
Received intact:	(Yes) No				Thermometer ID		
Cooler Custody Seals:	Yes No	(Y/N)			Correction Factor:	-5	
Sample Custody Seals:	Yes No	N/A			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												
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.																																
		1631 / 245.1 / 7470 / 7471 : Hg																														

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		1/22/21 8:38	2		
3 			4		
5			6		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 01.12.2021 08.38.00 AM

Work Order #: 684283

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)?	4.8
#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: JKR

PH Device/Lot#: 10BDH1991

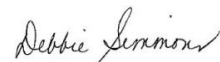
Checklist completed by:



Brianna Teel

Date: 01.12.2021

Checklist reviewed by:



Debbie Simmons

Date: 01.16.2021

Certificate of Analysis Summary 684389



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 15:18

Report Date: 01.30.2021 14:27

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684389-001	684389-002	684389-003	684389-004	684389-005	684389-006
	Field Id:	43-K-1-MW-W-211201	44-I-1-MW-W-211201	44-J-1-MW-W-211201	44-J-2-MW-W-211201	44-J-3-MW-W-211201	44-J-4-MW-W-211201
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	01.12.2021 13:10	01.12.2021 11:20	01.12.2021 10:55	01.12.2021 10:40	01.12.2021 11:05	01.12.2021 11:10
Inorganic Anions by EPA 300/300.1	Extracted:	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15
	Analyzed:	01.13.2021 12:54	01.13.2021 12:59	01.13.2021 13:58	01.13.2021 14:03	01.13.2021 14:08	01.13.2021 14:24
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		5620 25.0	3540 25.0	3730 25.0	4890 25.0	4870 25.0	3930 25.0
TDS by SM2540C	Extracted:						
	Analyzed:	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		10200 5.00	6240 5.00	6700 5.00	8640 5.00	8630 5.00	7070 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684389



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 15:18

Report Date: 01.30.2021 14:27

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684389-007	684389-008	684389-009	684389-010	684389-011	684389-012
	Field Id:	44-J-5-MW-W-211201	44-E-1-MW-W-211201	45-E-2-MW-W-211201	45-E-2-M-WD-211201	45-E-3-MW-W-211201	45-F-1-MW-W-211201
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	01.12.2021 11:00	01.12.2021 11:45	01.12.2021 11:40	01.12.2021 11:40	01.12.2021 13:05	01.12.2021 12:05
Inorganic Anions by EPA 300/300.1	Extracted:	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15	01.13.2021 11:15
	Analyzed:	01.13.2021 14:29	01.13.2021 14:51	01.13.2021 14:56	01.13.2021 15:01	01.13.2021 15:06	01.13.2021 15:11
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		4140 25.0	2490 25.0	1670 25.0	1660 25.0	4260 25.0	991 10.0
TDS by SM2540C	Extracted:						
	Analyzed:	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30	01.13.2021 14:30
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		7520 5.00	4680 5.00	3080 5.00	3130 5.00	7790 5.00	1770 5.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684389



GHD Services, INC- Midland, Midland, TX

Project Name: Dollarhide

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

Date Received in Lab: Tue 01.12.2021 15:18

Report Date: 01.30.2021 14:27

Project Manager: Debbie Simmons

Analysis Requested	Lab Id:	684389-013	684389-014	684389-015	684389-016	684389-017	684389-018
	Field Id:	45-FF-MW-W-211201	58-B-1-MW-W-211201	58-B-2-MW-W-211201	MW-8-W-211201	MW-9-W-211201	DHU-FWS-W-211201
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER
	Sampled:	01.12.2021 11:55	01.12.2021 12:45	01.12.2021 12:50	01.12.2021 12:25	01.12.2021 12:35	01.12.2021 12:20
Inorganic Anions by EPA 300/300.1	Extracted:	01.13.2021 11:15	01.13.2021 12:00	01.13.2021 12:00	01.13.2021 12:00	01.13.2021 12:00	01.13.2021 12:00
	Analyzed:	01.13.2021 15:17	01.13.2021 12:58	01.13.2021 13:30	01.13.2021 13:35	01.13.2021 13:40	01.13.2021 13:46
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Chloride		3770 25.0	6230 X 25.0	3560 25.0	994 10.0	2670 25.0	625 10.0
TDS by SM2540C	Extracted:						
	Analyzed:	01.13.2021 14:30	01.13.2021 16:00	01.13.2021 16:00	01.13.2021 16:00	01.13.2021 16:00	01.13.2021 16:00
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Total Dissolved Solids		6450 5.00	10500 5.00	1240 5.00	2420 5.00	4760 5.00	3120 5.00

BRL - Below Reporting Limit

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

Analytical Report 684389

for

GHD Services, INC- Midland

Project Manager: Nick Casten

Dollarhide

055270

01.30.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.30.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684389**
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) 684389. 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. 684389 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 684389****GHD Services, INC- Midland, Midland, TX**

Dollarhide

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
43-K-1-MW-W-211201	W	01.12.2021 13:10		684389-001
44-I-1-MW-W-211201	W	01.12.2021 11:20		684389-002
44-J-1-MW-W-211201	W	01.12.2021 10:55		684389-003
44-J-2-MW-W-211201	W	01.12.2021 10:40		684389-004
44-J-3-MW-W-211201	W	01.12.2021 11:05		684389-005
44-J-4-MW-W-211201	W	01.12.2021 11:10		684389-006
44-J-5-MW-W-211201	W	01.12.2021 11:00		684389-007
44-E-1-MW-W-211201	W	01.12.2021 11:45		684389-008
45-E-2-MW-W-211201	W	01.12.2021 11:40		684389-009
45-E-2-M-WD-211201	W	01.12.2021 11:40		684389-010
45-E-3-MW-W-211201	W	01.12.2021 13:05		684389-011
45-F-1-MW-W-211201	W	01.12.2021 12:05		684389-012
45-FF-MW-W-211201	W	01.12.2021 11:55		684389-013
58-B-1-MW-W-211201	W	01.12.2021 12:45		684389-014
58-B-2-MW-W-211201	W	01.12.2021 12:50		684389-015
MW-8-W-211201	W	01.12.2021 12:25		684389-016
MW-9-W-211201	W	01.12.2021 12:35		684389-017
DHU-FWS-W-211201	W	01.12.2021 12:20		684389-018



CASE NARRATIVE

Client Name: GHD Services, INC- Midland

Project Name: Dollarhide

Project ID: 055270
Work Order Number(s): 684389

Report Date: 01.30.2021
Date Received: 01.12.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147781 Inorganic Anions by EPA 300/300.1

Lab Sample ID 684389-014 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: 684389-014, -015, -016, -017, -018. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **43-K-1-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-001

Date Collected: 01.12.2021 13:10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5620	25.0	1.05	mg/L	01.13.2021 12:54		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	10200	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **44-I-1-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-002

Date Collected: 01.12.2021 11:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3540	25.0	1.05	mg/L	01.13.2021 12:59		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6240	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **44-J-1-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-003

Date Collected: 01.12.2021 10:55

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3730	25.0	1.05	mg/L	01.13.2021 13:58		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6700	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **44-J-2-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-004

Date Collected: 01.12.2021 10:40

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4890	25.0	1.05	mg/L	01.13.2021 14:03		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8640	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: 44-J-3-MW-W-211201

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-005

Date Collected: 01.12.2021 11:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4870	25.0	1.05	mg/L	01.13.2021 14:08		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	8630	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: 44-J-4-MW-W-211201

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-006

Date Collected: 01.12.2021 11:10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3930	25.0	1.05	mg/L	01.13.2021 14:24		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	7070	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: 44-J-5-MW-W-211201

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-007

Date Collected: 01.12.2021 11:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4140	25.0	1.05	mg/L	01.13.2021 14:29		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	7520	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **44-E-1-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-008

Date Collected: 01.12.2021 11:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2490	25.0	1.05	mg/L	01.13.2021 14:51		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4680	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **45-E-2-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-009

Date Collected: 01.12.2021 11:40

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1670	25.0	1.05	mg/L	01.13.2021 14:56		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3080	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: 45-E-2-M-WD-211201

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-010

Date Collected: 01.12.2021 11:40

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1660	25.0	1.05	mg/L	01.13.2021 15:01		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3130	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX
Dollarhide

Sample Id: 45-E-3-MW-W-211201

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-011

Date Collected: 01.12.2021 13:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4260	25.0	1.05	mg/L	01.13.2021 15:06		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	7790	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **45-F-1-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-012

Date Collected: 01.12.2021 12:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	991	10.0	0.421	mg/L	01.13.2021 15:11		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1770	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **45-FF-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-013

Date Collected: 01.12.2021 11:55

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 11:15

% Moisture:

Seq Number: 3147770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3770	25.0	1.05	mg/L	01.13.2021 15:17		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147470

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	6450	5.00	5.00	mg/L	01.13.2021 14:30		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **58-B-1-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-014

Date Collected: 01.12.2021 12:45

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 12:00

% Moisture:

Seq Number: 3147781

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6230	25.0	1.05	mg/L	01.13.2021 12:58	X	50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147722

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	10500	5.00	5.00	mg/L	01.13.2021 16:00		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **58-B-2-MW-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-015

Date Collected: 01.12.2021 12:50

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 12:00

% Moisture:

Seq Number: 3147781

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3560	25.0	1.05	mg/L	01.13.2021 13:30		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147722

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1240	5.00	5.00	mg/L	01.13.2021 16:00		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-8-W-211201** Matrix: Ground Water Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-016 Date Collected: 01.12.2021 12:25

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 12:00

% Moisture:

Seq Number: 3147781

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	994	10.0	0.421	mg/L	01.13.2021 13:35		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147722

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	2420	5.00	5.00	mg/L	01.13.2021 16:00		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **MW-9-W-211201** Matrix: Ground Water Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-017 Date Collected: 01.12.2021 12:35

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 12:00

% Moisture:

Seq Number: 3147781

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2670	25.0	1.05	mg/L	01.13.2021 13:40		50

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147722

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	4760	5.00	5.00	mg/L	01.13.2021 16:00		1



Certificate of Analytical Results 684389

GHD Services, INC- Midland, Midland, TX

Dollarhide

Sample Id: **DHU-FWS-W-211201**

Matrix: Ground Water

Date Received: 01.12.2021 15:18

Lab Sample Id: 684389-018

Date Collected: 01.12.2021 12:20

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.13.2021 12:00

% Moisture:

Seq Number: 3147781

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	625	10.0	0.421	mg/L	01.13.2021 13:46		20

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147722

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	3120	5.00	5.00	mg/L	01.13.2021 16:00		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: 3147770

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

MB Sample Id: 7719059-1-BLK

LCS Sample Id: 7719059-1-BKS

LCSD Sample Id: 7719059-1-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	23.9	96	23.8	95	90-110	0	20	mg/L	01.13.2021 11:31	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147781

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

MB Sample Id: 7719078-1-BLK

LCS Sample Id: 7719078-1-BKS

LCSD Sample Id: 7719078-1-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	24.1	96	24.1	96	90-110	0	20	mg/L	01.13.2021 12:37	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147770

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684283-021

MS Sample Id: 684283-021 S

MSD Sample Id: 684283-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1400	1250	2660	101	2660	101	90-110	0	20	mg/L	01.13.2021 11:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147770

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684389-005

MS Sample Id: 684389-005 S

MSD Sample Id: 684389-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4870	1250	6140	102	6140	102	90-110	0	20	mg/L	01.13.2021 14:14	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147781

Matrix: Ground Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684389-014

MS Sample Id: 684389-014 S

MSD Sample Id: 684389-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6230	1250	7650	114	7680	116	90-110	0	20	mg/L	01.13.2021 13:09	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3147781

Matrix: Water

Prep Method: E300P

Date Prep: 01.13.2021

Parent Sample Id: 684514-003

MS Sample Id: 684514-003 S

MSD Sample Id: 684514-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.0	25.0	34.8	99	34.9	100	90-110	0	20	mg/L	01.13.2021 15:00	

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

GHD Services, INC- Midland Dollarhide

Analytical Method: TDS by SM2540C

Seq Number: 3147470

Matrix: Water

MB Sample Id: 3147470-1-BLK

LCS Sample Id: 3147470-1-BKS

LCSD Sample Id: 3147470-1-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	992	99	1010	101	80-120	2	10	mg/L	01.12.2021 10:16	

Analytical Method: TDS by SM2540C

Seq Number: 3147722

Matrix: Water

MB Sample Id: 3147722-1-BLK

LCS Sample Id: 3147722-1-BKS

LCSD Sample Id: 3147722-1-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	967	97	966	97	80-120	0	10	mg/L	01.12.2021 16:00	

Analytical Method: TDS by SM2540C

Seq Number: 3147470

Matrix: Water

Parent Sample Id: 684283-021

MD Sample Id: 684283-021 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	3370	3740	10	10	mg/L	01.12.2021 10:16	

Analytical Method: TDS by SM2540C

Seq Number: 3147470

Matrix: Ground Water

Parent Sample Id: 684389-004

MD Sample Id: 684389-004 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	8640	8600	0	10	mg/L	01.13.2021 14:30	

Analytical Method: TDS by SM2540C

Seq Number: 3147722

Matrix: Ground Water

Parent Sample Id: 684389-014

MD Sample Id: 684389-014 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	10500	10500	0	10	mg/L	01.13.2021 16:00	

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



1039380

www.xenco.com Page _____ of _____

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: _____	

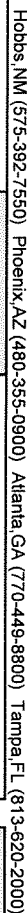
[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	Chloride	TDS
Y3-K-1-MW-W-211201	GW	01/12/21	1310	-	1	X	X
Y4-I-1-MW-W-211201	GW	01/12/21	1120	-	1	X	X
Y4-J-1-MW-W-211301	GW	01/12/21	1055	-	1	X	X
Y4-J-2-MW-W-211301	GW	01/12/21	1040	-	1	X	X
Y4-J-3-MW-W-211301	GW	01/12/21	1105	-	1	X	X
Y4-J-4-MW-W-211301	GW	01/12/21	1110	-	1	X	X
Y4-J-5-MW-W-211301	GW	01/12/21	1100	-	1	X	X
Y5-E-1-MW-W-211201	GW	01/12/21	1145	-	1	X	X
Y5-E-2-MW-W-211201	GW	01/12/21	1140	-	1	X	X
Y5-E-3-MW-WD-211201	GW	01/12/21	1140	-	1	X	X

Total	200.7 / 6010
8RCRA	200.8 / 6020:
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
<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

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

1		1/12/21	2		
3	13012		4		
5		15/16	6		



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

Chain of Custody

Work Order No: 108493809

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

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	Chloride	TDS
45-E-3-MW-W-211201	GW	01/2/21	1305	-	1	X	X
45-F-1-MW-W-211201	GW	01/2/21	1205	-	1	X	X
45-FF-MW-W-211201	GW	01/2/21	1155	-	1	X	X
58-B-1-MW-W-211201	GW	01/12/21	1245	-	1	X	X
58-B-2-MW-W-211201	GW	01/12/21	1250	-	1	X	X
MW-8-W-211201	GW	01/12/21	1235	-	1	X	X
MW-9-W-211201	GW	01/12/21	1235	-	1	X	X
DHW-FWS-W-211201	GW	01/12/21	1220	-	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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		
TCLP / SPLP	6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
		1633 / 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
					

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD Services, INC- Midland

Date/ Time Received: 01.12.2021 03.18.00 PM

Work Order #: 684389

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

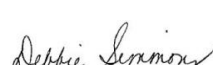
Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	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?	No
#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 Xenco Stafford
#18 Water VOC samples have zero headspace?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: JKR

PH Device/Lot#: 10BDH1991

Checklist completed by:	 Brianna Teel	Date: 01.12.2021
Checklist reviewed by:	 Debbie Simmons	Date: 01.16.2021

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
	1/12/2021	5,620	10,200
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
	1/12/2021	3,540	6,240

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
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
	1/12/2021	3,730	6,700
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
	1/12/2021	4,890	8,640

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
	1/12/2021	4,870	8,630
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
	1/12/2021	3,930	7,070
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
	1/12/2021	4,140	7,520

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
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
	1/12/2021	2,490	4,680
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
	1/12/2021	1,670	3,080
DUP	1/12/2021	1,660	3,130

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
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
	1/12/2021	4,260	7,790
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
	1/12/2021	991	1,770

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
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
	1/12/2021	3,770	6,450
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
	1/12/2021	6,230	10,500

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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
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
	1/12/2021	3,560	1,240
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
	1/8/2021	1,630	2,800

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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
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
	1/11/2021	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
	1/11/2021	605	1,470
	4/7/2021	NS	NS
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
	1/11/2021	327	911
	4/7/2021	NS	NS

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Dollarhide, Texas

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
	1/11/2021	252	975
	4/7/2021	NS	NS
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
	1/11/2021	380	1,580
	4/7/2021	NS	NS
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
	1/12/2021	NS	NS
	4/7/2021	NS	NS

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Dollarhide, Texas

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
	1/12/2021	994	2,420
	4/7/2021	NS	NS
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
	1/12/2021	2,670	4,760
	4/7/2021	NS	NS
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
	1/11/2021	3,880	8,180
	4/7/2021	NS	NS

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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
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	11,800
	1/11/2021	7,290	11,900
	4/7/2021	NS	NS
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
	1/11/2021	13,300	22,300
	4/7/2021	NS	NS
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
	1/11/2021	1,270	4,180
DUP	1/11/2021	1,600	4,260
	4/7/2021	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
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
	1/11/2021	1,260	3,210
	4/7/2021	NS	NS
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
	1/11/2021	902	1,880
	4/7/2021	NS	NS
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
	1/11/2021	403	1,050
	4/7/2021	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-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
	1/11/2021	7,680	4,200
	4/7/2021	NS	NS
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
	1/11/2021	21,000	35,800
	4/7/2021	NS	NS
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
	1/11/2021	7,350	12,500
	4/7/2021	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-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
	1/11/2021	1,130	2,460
	4/7/2021	NS	NS
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
	1/11/2021	3,050	10,100
	4/7/2021	NS	NS
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
	1/11/2021	11,000	17,600
	4/7/2021	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-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
	1/11/2021	4,160	8,970
	4/7/2021	NS	NS
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
	1/11/2021	1,680	8,690
	4/7/2021	NS	NS
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
	1/11/2021	23,900	36,600
	4/7/2021	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-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
	1/11/2021	1,400	3,370
	4/7/2021	NS	NS
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
	1/11/2021	2,210	4,160
	4/7/2021	NS	NS
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
	1/8/2021	3,940	6,840
	4/7/2021	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-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
	1/8/2021	550	1,280
	4/7/2021	NS	NS
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
	1/11/2021	2,100	4,050
	4/7/2021	NS	NS
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
	1/11/2021	9,500	17,100
	4/7/2021	NS	NS
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
	1/8/2021	349	1,170
DUP	1/8/2021	303	1,170
	4/7/2021	341	1,120
DUP	4/7/2021	323	1,170

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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
	1/8/2021	190	1,060
	4/7/2021	185	1,040
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
	1/8/2021	70.8	610
	4/7/2021	66.0	619
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
	1/7/2021	273	1,410
	4/7/2021	NS	NS
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
	1/7/2021	659	1,230
	4/7/2021	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
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
	1/7/2021	264	680
	4/7/2021	NS	NS
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
	1/7/2021	44.4	435
	4/7/2021	NS	NS
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
	1/7/2021	146	1,260
	4/7/2021	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
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
	1/7/2021	142	811
	4/7/2021	NS	NS
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
	1/7/2021	2,170	4,550
	4/7/2021	NS	NS
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
	1/7/2021	6,110	11,200
	4/7/2021	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
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
	1/8/2021	242	789
	4/7/2021	NS	NS
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
	1/8/2021	336	1,700
	4/7/2021	NS	NS
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
	1/8/2021	152	2,030
	4/7/2021	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
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
	1/8/2021	430	1,160
	4/7/2021	NS	NS
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
	1/8/2021	185	1,110
DUP	1/8/2021	186	1,130
	4/7/2021	NS	NS
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
	1/8/2021	95.2	455
	4/7/2021	26.4	466
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
	1/8/2021	56.4	507
	4/7/2021	58.1	519
NM-MW-16			
	2/18/2020	NS	NS
	4/9/2020	NS	NS
	7/10/2020	NS	NS
	10/8/2020	NS	NS
	1/8/2021	NS	NS
	4/7/2021	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
	1/8/2021	182	971
	4/7/2021	207	1,010

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
	1/8/2021	23.9	381
	4/7/2021	23.4	377
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
	1/8/2021	29.0	541
	4/7/2021	28.1	529
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
	1/12/2021	625	3,120
	4/7/2021	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
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
	1/11/2021	2,200	4,290
	4/7/2021	NS	NS
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
	1/8/2021	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
	1/8/2021	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
	1/7/2021	2,030	3,780
DUP	1/7/2021	1,930	3,830

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
	1/8/2021	NS	NS
	4/7/2021	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
	1/8/2021	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
	1/8/2021	526	2,070
	4/7/2021	NS	NS
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
	1/8/2021	1,040	1,940
	4/7/2021	NS	NS

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

February 15, 2021

To: Nick Casten, Liz Whiddon

Ref. No.: 055270

From: ^{CK}Chris G. Knight/eew/33-NF

Tel: 512-506-8803

**Subject: Analytical Results and Reduced Validation
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021**

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 January 2021. 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 1 per 20 investigative samples and/or 1 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 1 per 20 investigative samples and/or 1 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) Several MS/MSDs were reported with elevated recoveries due to possible matrix interferences and were 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 4 field duplicate sample sets.

To assess the analytical and sampling protocol precision, 4 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 50 percent for water samples. 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
January 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
NM-MW-6-W-210701	NM-MW-6	Water	01/07/2021	12:00	X	X	
NM-MW-5-W-210701	NM-MW-5	Water	01/07/2021	12:30	X	X	
NM-MW-1-W-210701	NM-MW-1	Water	01/07/2021	13:00	X	X	
NM-MW-2-W-210701	NM-MW-2	Water	01/07/2021	13:30	X	X	MS/MSD
NM-MW-3-W-210701	NM-MW-3	Water	01/07/2021	14:00	X	X	DUP
NM-MW-7-W-210701	NM-MW-7	Water	01/07/2021	14:30	X	X	
RRR-Ranch Windmill-W-210701	Ranch Windmill	Water	01/07/2021	15:00	X	X	
RRR-Ranch Windmill-WD-210701	Ranch Windmill	Water	01/07/2021	15:00	X	X	
NM-MW-4-W-210701	NM-MW-4	Water	01/07/2021	15:30	X	X	
NM-MW-8-W-210701	NM-MW-8	Water	01/07/2021	16:00	X	X	
NM-MW-13-W-210801	NM-MW-13	Water	01/08/2021	10:00	X	X	
NM-MW-13-DW-210801	NM-MW-13	Water	01/08/2021	10:00	X	X	Field duplicate of NM-MW-13
NM-MW-11-W-210801	NM-MW-11	Water	01/08/2021	10:15	X	X	
NM-MW-15-W-210801	NM-MW-15	Water	01/08/2021	10:30	X	X	
NM-MW-17-W-210801	NM-MW-17	Water	01/08/2021	10:45	X	X	
NM-MW-21-W-210801	NM-MW-21	Water	01/08/2021	11:15	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
NM-MW-20-W-210801	NM-MW-20	Water	01/08/2021	11:30	X	X	
NM-MW-10-W-210801	NM-MW-10	Water	01/08/2021	11:45	X	X	
NM-MW-12-W-210801	NM-MW-12	Water	01/08/2021	12:00	X	X	MS/MSD
Wilson Ranch Well-W-210801	WILSON RANCH WW	Water	01/08/2021	12:15	X	X	
MW-32-W-210801	MW-32	Water	01/08/2021	12:45	X	X	
MW-32-WD-210801	MW-32	Water	01/08/2021	12:45	X	X	Field duplicate of MW-32; MS/MSD
MW-33-W-210801	MW-33	Water	01/08/2021	13:00	X	X	DUP
MW-34-W-210801	MW-34	Water	01/08/2021	13:15	X	X	
MW-29-W-210801	MW-29	Water	01/08/2021	13:30	X	X	DUP
MW-28-W-210801	MW-28	Water	01/08/2021	13:45	X	X	
58-B-3-MW-W-210801	58-B-3	Water	01/08/2021	14:00	X	X	
NM-MW-9-W-210801	NM-MW-9	Water	01/08/2021	14:15	X	X	
NM-MW-14-W-210801	NM-MW-14	Water	01/08/2021	14:30	X	X	
Smith Residence-W-210801	SMITH RESIDENCE	Water	01/08/2021	14:45	X	X	
MW-17-W-211101	MW-17	Water	01/11/2021	10:45	X	X	
MW-23-W-211101	MW-23	Water	01/11/2021	10:55	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
MW-22-W-211101	MW-22	Water	01/11/2021	11:00	X	X	
MW-30-W-211101	MW-30	Water	01/11/2021	11:10	X	X	
MW-13-W-211101	MW-13	Water	01/11/2021	11:20	X	X	
MW-13-WD-211101	MW-13	Water	01/11/2021	11:20	X	X	Field duplicate of MW-13
MW-4-W-211101	MW-4	Water	01/11/2021	11:30	X	X	
MW-3-W-211101	MW-3	Water	01/11/2021	11:50	X	X	MS/MSD, DUP
MW-14-W-211101	MW-14	Water	01/11/2021	12:10	X	X	
MW-15-W-211101	MW-15	Water	01/11/2021	12:20	X	X	MS/MSD, DUP
MW-16-W-211101	MW-16	Water	01/11/2021	12:35	X	X	
MW-21-W-211101	MW-21	Water	01/11/2021	12:45	X	X	
MW-19-W-211101	MW-19	Water	01/11/2021	13:00	X	X	
MW-26-W-211101	MW-26	Water	01/11/2021	13:10	X	X	MS/MSD, DUP
MW-20-W-211101	MW-20	Water	01/11/2021	13:15	X	X	
MW-27-W-211101	MW-27	Water	01/11/2021	13:30	X	X	
MW-10-W-211101	MW-10	Water	01/11/2021	13:35	X	X	
MW-24-W-211101	MW-24	Water	01/11/2021	13:45	X	X	

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
MW-18-W-211101	MW-18	Water	01/11/2021	13:55	X	X	
Livermore-W-211101	Livermore	Water	01/11/2021	14:05	X	X	
MW-5-W-211101	MW-5	Water	01/11/2021	14:15	X	X	
MW-6-W-211101	MW-6	Water	01/11/2021	14:25	X	X	
MW-11-W-211101	MW-11	Water	01/11/2021	14:35	X	X	
MW-31-W-211101	MW-31	Water	01/11/2021	14:55	X	X	
MW-12-W-211101	MW-12	Water	01/11/2021	15:00	X	X	
MW-25-W-211101	MW-25	Water	01/11/2021	15:10	X	X	
44-J-2-MW-W-211201	44-J-2	Water	01/12/2021	10:40	X	X	DUP
44-J-1-MW-W-211201	44-J-1	Water	01/12/2021	10:55	X	X	
44-J-5-MW-W-211201	44-J-5	Water	01/12/2021	11:00	X	X	
44-J-3-MW-W-211201	44-J-3	Water	01/12/2021	11:05	X	X	MS/MSD
44-J-4-MW-W-211201	44-J-4	Water	01/12/2021	11:10	X	X	
44-I-1-MW-W-211201	44-I-1	Water	01/12/2021	11:20	X	X	
45-E-2-MW-W-211201	45-E-2	Water	01/12/2021	11:40	X	X	
45-E-2-M-WD-211201	45-E-2	Water	01/12/2021	11:40	X	X	Field duplicate of 45-E-2

Table 1

Sample Collection and Analysis Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					Chloride	TDS	
44-E-1-MW-W-211201	44-E-1	Water	01/12/2021	11:45	X	X	
45-FF-MW-W-211201	45-FF	Water	01/12/2021	11:55	X	X	
45-F-1-MW-W-211201	45-F-1	Water	01/12/2021	12:05	X	X	
DHU-FWS-W-211201	DHU-FWS	Water	01/12/2021	12:20	X	X	
MW-8-W-211201	MW-8	Water	01/12/2021	12:25	X	X	
MW-9-W-211201	MW-9	Water	01/12/2021	12:35	X	X	
58-B-1-MW-W-211201	58-B-1	Water	01/12/2021	12:45	X	X	MS/MSD, DUP
58-B-2-MW-W-211201	58-B-2	Water	01/12/2021	12:50	X	X	
45-E-3-MW-W-211201	45-E-3	Water	01/12/2021	13:05	X	X	
43-K-1-MW-W-211201	43-K-1	Water	01/12/2021	13:10	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
January 2021

Location ID:		43-K-1	44-E-1	44-I-1	44-J-1	44-J-2	44-J-3	44-J-4
Sample Name:		43-K-1-MW-W-211201	44-E-1-MW-W-211201	44-I-1-MW-W-211201	44-J-1-MW-W-211201	44-J-2-MW-W-211201	44-J-3-MW-W-211201	44-J-4-MW-W-211201
Sample Date:		01/12/2021	01/12/2021	01/12/2021	01/12/2021	01/12/2021	01/12/2021	01/12/2021
Parameters		Unit						
General Chemistry								
Chloride	mg/L	5620	2490	3540	3730	4890	4870	3930
TDS	mg/L	10200	4680	6240	6700	8640	8630	7070

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		44-J-5	45-E-2	45-E-2	45-E-3	45-F-1	45-FF	58-B-1
Sample Name:		44-J-5-MW-W-211201	45-E-2-MW-W-211201	45-E-2-M-WD-211201	45-E-3-MW-W-211201	45-F-1-MW-W-211201	45-FF-MW-W-211201	58-B-1-MW-W-211201
Sample Date:		01/12/2021	01/12/2021	01/12/2021	01/12/2021	01/12/2021	01/12/2021	01/12/2021
				Duplicate				
Parameters	Unit							
General Chemistry								
Chloride	mg/L	4140	1670	1660	4260	991	3770	6230
TDS	mg/L	7520	3080	3130	7790	1770	6450	10500

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		58-B-2	58-B-3	DHU-FWS	Livermore	MW-3	MW-4	MW-5	MW-6
Sample Name:		58-B-2-MW-W-211201	58-B-3-MW-W-210801	DHU-FWS-W-211201	Livermore-W-211101	MW-3-W-211101	MW-4-W-211101	MW-5-W-211101	MW-6-W-211101
Sample Date:		01/12/2021	01/08/2021	01/12/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021
Parameters		Unit							
General Chemistry									
Chloride	mg/L	3560	1630	625	2200	605	327	252	380
TDS	mg/L	1240	2800	3120	4290	1470	911	975	1580

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-13	MW-14	MW-15
Sample Name:		MW-8-W-211201	MW-9-W-211201	MW-10-W-211101	MW-11-W-211101	MW-12-W-211101	MW-13-W-211101	MW-13-WD-211101	MW-14-W-211101	MW-15-W-211101
Sample Date:		01/12/2021	01/12/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021
								Duplicate		
Parameters	Unit									
General Chemistry										
Chloride	mg/L	994	2670	3880	7290	13300	1270	1600	1260	902
TDS	mg/L	2420	4760	8180	11900	22300	4180	4260	3210	1880

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	MW-24
Sample Name:		MW-16-W-211101	MW-17-W-211101	MW-18-W-211101	MW-19-W-211101	MW-20-W-211101	MW-21-W-211101	MW-22-W-211101	MW-23-W-211101	MW-24-W-211101
Sample Date:		01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021	01/11/2021
Parameters		Unit								
General Chemistry										
Chloride	mg/L	403	7680	21000	7350	1130	3050	11000	4160	1680
TDS	mg/L	1050	4200	35800	12500	2460	10100	17600	8970	8690

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		MW-25	MW-26	MW-27	MW-28	MW-29	MW-30	MW-31	MW-32	MW-32
Sample Name:		MW-25-W-211101	MW-26-W-211101	MW-27-W-211101	MW-28-W-210801	MW-29-W-210801	MW-30-W-211101	MW-31-W-211101	MW-32-W-210801	MW-32-WD-210801
Sample Date:		01/11/2021	01/11/2021	01/11/2021	01/08/2021	01/08/2021	01/11/2021	01/11/2021	01/08/2021	01/08/2021
										Duplicate
Parameters	Unit									
General Chemistry										
Chloride	mg/L	23900	1400	2210	3940	550	2100	9500	349	303
TDS	mg/L	36600	3370	4160	6840	1280	4050	17100	1170	1170

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:	MW-33	MW-34	NM-MW-1	NM-MW-2	NM-MW-3	NM-MW-4	NM-MW-5	NM-MW-6
Sample Name:	MW-33-W-210801	MW-34-W-210801	NM-MW-1-W-210701	NM-MW-2-W-210701	NM-MW-3-W-210701	NM-MW-4-W-210701	NM-MW-5-W-210701	NM-MW-6-W-210701
Sample Date:	01/08/2021	01/08/2021	01/07/2021	01/07/2021	01/07/2021	01/07/2021	01/07/2021	01/07/2021

Parameters	Unit
-------------------	-------------

General Chemistry

Chloride	mg/L	190	70.8	273	659	264	44.4	146	142
TDS	mg/L	1060	610	1410	1230	680	435	1260	811

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		NM-MW-7	NM-MW-8	NM-MW-9	NM-MW-10	NM-MW-11	NM-MW-12	NM-MW-13
Sample Name:		NM-MW-7-W-210701	NM-MW-8-W-210701	NM-MW-9-W-210801	NM-MW-10-W-210801	NM-MW-11-W-210801	NM-MW-12-W-210801	NM-MW-13-W-210801
Sample Date:		01/07/2021	01/07/2021	01/08/2021	01/08/2021	01/08/2021	01/08/2021	01/08/2021
Parameters	Unit							
General Chemistry								
Chloride	mg/L	2170	6110	242	336	152	430	185
TDS	mg/L	4550	11200	789	1700	2030	1160	1110

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		NM-MW-13	NM-MW-14	NM-MW-15	NM-MW-17	NM-MW-20	NM-MW-21
Sample Name:		NM-MW-13-DW-210801	NM-MW-14-W-210801	NM-MW-15-W-210801	NM-MW-17-W-210801	NM-MW-20-W-210801	NM-MW-21-W-210801
Sample Date:		01/08/2021	01/08/2021	01/08/2021	01/08/2021	01/08/2021	01/08/2021
		Duplicate					
Parameters	Unit						
General Chemistry							
Chloride	mg/L	186	95.2	56.4	182	23.9	29.0
TDS	mg/L	1130	455	507	971	381	541

Table 2

Analytical Results Summary
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

Location ID:		Ranch Windmill		Ranch Windmill		SMITH RESIDENCE		WILSON RANCH WW	
Sample Name:		RRR-Ranch Windmill-W-210701		RRR-Ranch Windmill-WD-210701		Smith Residence-W-210801		Wilson Ranch Well-W-210801	
Sample Date:		01/07/2021		01/07/2021		01/08/2021		01/08/2021	
Parameters		Unit							
General Chemistry									
Chloride	mg/L	2030		1930		1040		526	
TDS	mg/L	3780		3830		1940		2070	

Notes:

TDS - Total Dissolved Solids

Table 3

Analytical Methods
Groundwater Monitoring Well Sampling
Chevron Environmental Management Company (CEMC) - Dollarhide
Andrews County, Texas
January 2021

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



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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 42228

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 42228
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of Semi-Annual Groundwater Monitoring Report (January to June 2021) Report: Content satisfactory 1. Follow recommendations stated within First Half 2021 Groundwater Monitoring Summary Report. a. Continue conducting quarterly monitoring of the monitor wells installed in 2019 and 2020 b. Continue collecting all viable wells in the groundwater monitoring system semi-annually	12/29/2021