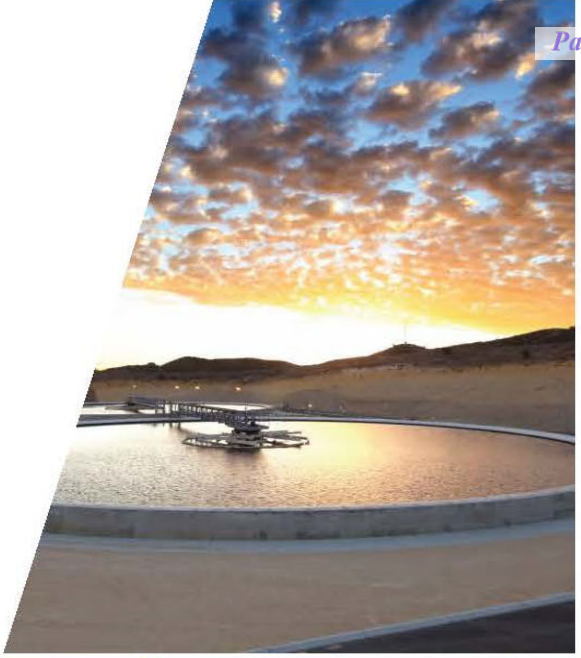
REVIEWED
By Mike Buchanan at 4:32 pm, Aug 09, 2023

Review of the Site Status Report 2022 for Hobbs Tank 5201 Release: **Content Satisfactory**
1. Continue air sparging as recommend and approved by the NMOCD.
2. Install Oxygen Release Socks in the same well as the one used for air sparging, HTRW-1 and in wells RW-1, HTRW-3 to increase biodegradation of TPH in area.
3. Continue to groundwater monitor and send 2023 report no later than April 1, 2024.



Site Status Report for 2022

Hobbs Tank 5201 Release AP-113
Lea County, New Mexico

March 2023

HF Sinclair Corporation

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1. Introduction

This 2022 status report is submitted by GHD Services, Inc. (GHD), on behalf of **HF Sinclair Corporation** for the Hobbs Tank 5201 Release, AP-113, (Site), located in Lea County, New Mexico (**Figure 1**). The C-141 notification for the release was submitted to the New Mexico Oil Conservation District (NMOCD) on July 22, 2004. This report includes the status of groundwater monitoring and remediation at the Site for the period from March 2021 to December 2022.

1.1 Site Background

On July 22, 2004, a leak of an unknown volume of crude oil was discovered in a 6-inch pipeline from the crude oil truck unloading rack at the storage tank 5201 (**Figure 2**). The line was exposed and clamped, and the section was replaced, immediately. Petroleum-stained soil from the release was immediately excavated in an area that covered approximately 4 feet by 20 feet by 18 feet deep. Additional staining observed close to the tank was not excavated due to the proximity of the tank and fear of compromising the 1930-vintage tank's structural integrity. No fluid was observed during the excavation.

1.2 Site Setting

The Site is located approximately 3.5 miles south of Hobbs, New Mexico on County Road 61 in the NW ¼ of the NW ¼ of Section 22, Township 19 South, and Range 38 East in Lea County, New Mexico (32° 39.079' N, 103°8.530' W). The topography at the Site is relatively flat and the average elevation is 3,595 feet mean sea level (**Figure 1**). The Site is located on property within the Holly Energy Partners tank farm, which is on property owned by Enterprise Products and is surrounded by fencing with access controlled by a locked gate. The surrounding area contains crude oil storage tanks, pipelines, and open rangeland.

1.3 Site Geology and Hydrogeology

The surface soils encountered at the Site are silty to fine sands approximately 10-feet thick. This surface soil is consistent with the surface soil description (Quaternary sediment) for this physiographic province. The soil types encountered below this surface layer at the Site are indurated (hardened) calcium carbonate intervals of variable thickness locally referred to as "caliche", fine-grained sand, sandstone with caliche and the saturated zone consisting of fractured sandstone.

Groundwater in the area of the Site is primarily produced from the Ogallala aquifer. The Ogallala Formation unconformably overlies the Triassic age Dockum group. The Dockum group consists of red shale and sandstone and is commonly referred to as "red beds". The red beds can exceed 1,000 feet in thickness in this region and may produce small amounts of poor-quality water at the bottom of the formation.

The regional groundwater flow direction in the Ogallala is toward the southeast and follows the Triassic subcrop surface. Groundwater quality is very good with total dissolved solids (TDS)

concentrations typically below 1,000 mg/L. Recharge primarily occurs via infiltration from precipitation events.

Groundwater at the Site is found in fractured sandstone consistent with the Ogallala aquifer. The depth to groundwater at the Site is approximately 50 feet-below ground surface (ft-bgs). The groundwater flow is towards the east-southeast and the groundwater gradient is approximately 0.001ft/ft.

1.4 Summary of Site Conditions

Safety and Environmental Solutions Inc. (SESI) installed six groundwater monitoring wells, one recovery well and advanced seven boreholes shortly after the release to characterize the release and recover the released crude oil in the area of the tank. Five boreholes and two monitoring wells were installed inside of the berm area in 2004. The first borehole was completed as a 2-inch monitor well (MW-1), adjacent to the leak location. Two monitoring wells, MW-2 and MW-3 were installed outside the bermed area in 2004, down-gradient of the release. A 4-inch recovery well (RW-1) was installed in the area near the tank and MW-1 in 2004. In 2010, two additional monitoring wells were installed, MW-4, outside the bermed area and MW-5, up-gradient and inside the bermed area (**Figure 2**).

SESI monitored groundwater conditions and recovered crude oil from wells MW-1 and RW-1 from 2004 to 2011. In 2004, crude oil was initially measured in MW-1 at approximately 6 feet thick. In the recovery well, RW-1, the initial product thickness was measured at 2.75 feet. Crude oil was not found in any other areas of the Site. In 2005, outside the tank berm area and approximately 200 feet southeast from the release point, benzene was detected in the down-gradient area in monitor well MW-2 at a concentration of 72 µg/L, which is above the New Mexico Water Quality Control Commission (NMWQCC) standard of 5 µg/L. Benzene has not been detected above the standard in this well or in any other monitoring wells located down-gradient and outside the berm area since 2005.

In June 2013, four recovery wells were installed by GHD within the berm area and near the release area to delineate the crude oil and to recover crude oil (**Figure 2**). In September 2013, a crude oil only recovery system with remote access was installed with oil only skimmer pumps in well RW-1 and recovery wells, HTRW-1, and HTRW-3. This system was used until March 2015 when only negligible amounts of recoverable oil were remaining in the area. Since 2015, Enhanced Fluid Recovery (EFR) using a vacuum truck has been used to recover crude oil from wells MW-1, RW-1, HTRW-1, and HTRW-3. Oil absorbent socks have been used in these wells when EFR was not used during the months between EFR uses.

Appendix A contains information on fluid levels and crude oil thickness since 2012. Wells MW-1 and RW-1 contained oil sporadically from 2012 to March 2019. HTRW-1 contained oil sporadically from 2013 to October 2016. Wells HTRW-2 and HTRW-4 have never showed any measurable oil. HTRW-3 had shown measurable oil from 2013 to 2020 and none has been measured in this well since June 2020 (**Appendix A**).

1.5 Site Conceptual Model

The Site is located in an area of multiple crude oil gathering lines and storage tanks and 2 miles west of Highway 18 and three miles south of Hobbs, New Mexico. The entire site is fenced, and access is restricted for people and cattle. The closest residences are approximately 0.5 miles northeast of the Site (**Figure 1**). The closest drinking water well (L08890) is located approximately 900 feet to the southeast of the Site. This well was sampled for hydrocarbons following the discovery of the release and was not impacted by the release (Stage 1/Stage 2 Abatement Plan, November 2012, CRA). Another well (l08279) is located approximately 1900 ft northeast from the site was sampled in March 2019 and showed no detections of any inorganic or hydrocarbon constituents above state standards.

Groundwater at the Site is found at approximately 50 ft-bgs and the groundwater flow direction is towards the southeast at an average gradient of approximately 0.001 feet/foot (ft/ft). One monitoring well (MW-5) is located up-gradient of the release area and four monitoring wells are located down-gradient of the release. The dissolved phase hydrocarbon concentrations in groundwater at these locations have been below the NMWQCC standards for benzene, toluene, ethylbenzene, and total xylenes (BTEX) since 2005. The impacts to groundwater, from the release, appear to be limited to the immediate area of the leak located near the tank. Recovery well HTRW-1 has had detections of benzene. In December 2019, the benzene concentration (the only constituent above state NMWQCC standards) in this well was 57.5 micrograms per liter (µg/L), in December 2020 the benzene concentration was 626 µg/L and in December 2021 benzene was detected below the standard at 2.49 µg/L. Since September 2021 concentrations of benzene have been below the standard on five (5) occasions and on one occasion the concentration in this well was above the standard of 5.0 µg/ L at a concentration of 585 µg/ L in March 2022 (**Table 1**).

The primary chemicals of concern are hydrocarbon constituents that have dissolved from the released crude oil. The NMWQCC standards for hydrocarbons in groundwater for this Site are:

- 5 µg/L for benzene
- 1000 µg/L for toluene
- 700 µg/L for ethylbenzene
- 620 µg/L for total xylenes

The polycyclic aromatic hydrocarbons (PAHs) analyses for all sampled wells showed no detections of any PAHs above the laboratory lower method reporting limit for five consecutive sampling events conducted from March 2018 to March 2019.

Groundwater samples were analyzed for TDS, chloride and RCRA metals, which included arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver for all sampled wells in 2014, 2016, 2017, 2019 and 2020. The analyses showed none of these constituents were above state standards in 2019 and 2020.

There appears to be no remaining threat to the environment or to drinking water wells located in the area caused by the release and any remaining impacts. Dissolved phase hydrocarbons have only been detected in the immediate area of the release. Other constituents, PAHs and RCRA metals, that may be associated with the released oil have not been detected consistently within the berm

area near the release or outside the berm area and down-gradient of the release above state standards. Crude oil has not been measured in any wells since June 2020 and the only well that has shown detections of benzene above the standard is recovery well HTRW-1, which had contained measurable crude oil until 2016.

2. Site Activities

Groundwater monitoring was conducted at the Site by GHD for 2021 and 2022 in March, June, September, and December. The groundwater monitoring included measurement of fluid levels in all monitoring wells and the recovery wells, collection of groundwater samples for laboratory analysis for BTEX and total petroleum hydrocarbons-gasoline range organics (TPH-GRO) and total petroleum hydrocarbons- diesel range organics (TPH-DRO). Remediation activities that have been performed in well HTRW-1 since 2021, have included Cool-Ox treatment, EFR using a vacuum truck and air sparging.

3. Groundwater Monitoring Procedures and Results

For this reporting period, fluid levels were measured in all monitoring wells and recovery wells at the Site in 2021 and 2022. Groundwater samples were collected on a semiannual basis from the monitor wells MW-4, and MW-5, and from recovery well HTRW-1, quarterly. Groundwater samples were not collected from monitoring wells MW-2 and MW-3 in 2021 and 2022, as both wells were dry or contained an insufficient amount of water for sample acquisition. **Appendix A** shows historical fluid levels from 2012 to December 2022. **Table 1** summarizes hydrocarbon analytical results for 2021 and 2022. **Appendix B** summarizes historical analytical results from August 2004 to December 2022.

Prior to purging of the wells and obtaining groundwater samples, fluid levels were measured in the wells that have contained crude oil, using an oil/water level indicator. The monitor wells were purged prior to sample acquisition at a rate of 160 ml/min or less or with disposable bailers. Groundwater samples were collected following stabilization of the field parameters. The meters used for the field parameters were calibrated prior to use. Field parameters obtained prior to sampling included temperature, specific conductance, pH, dissolved oxygen, and oxidation-reduction potential (ORP) and are tabulated in **Appendix B**. The groundwater samples were analyzed for BTEX by Method 8260 and for TPH-GRO and TPH-DRO by Method 8015. Groundwater samples were immediately placed into the appropriate laboratory provided containers and placed in an ice-chilled cooler for transport to the DHL laboratory, Round Rock, TX under chain-of-custody procedures.

March 2021

In March 2021, crude oil was not measured in any of the wells during this quarter (**Appendix A**).

Water levels measured in March 2021 were generally 0.10 to 0.20 feet lower than water levels measured in December 2020. For the March 2021 monitoring period, the groundwater flow, as previously observed, (**Figure 4**) was towards the southeast with a gradient of 0.001 ft/ft (0.001 ft/ft in March 2020).

The March 2021 hydrocarbon concentrations for each sampled well are shown in **Table 1, Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. The March 2021 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- None of the BTEX constituents, were detected above NMWQCC standards in wells MW-4 and MW-5.
- Benzene was detected above the NMWQCC standard in well HTRW-1 at 849 µg/L.
- Ethylbenzene and xylenes were detected in well HTRW-1 below the NMWQCC standards.
- TPH-GRO was detected above the lower laboratory reporting limit (0.06 mg/L) in well HTRW-1 at 2.36 mg/L and was not detected above the limit in wells MW-4 and MW-5.
- TPH-DRO were detected above the lower laboratory reporting limit in wells MW-5 at 0.281 mg/L. and HTRW-1 at 0.204 mg/L.

Concentrations of dissolved hydrocarbons in groundwater during the March 2021 monitoring period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 12**).

June 2021

In June 2021, crude oil was not measured in any of the wells during this quarter (**Appendix A)**.

Water levels measured in June 2021 were approximately 0.10 to 0.20 feet lower than water levels measured in March 2021. For the June 2021 monitoring period, the groundwater flow was towards the southeast with a gradient of 0.001 ft/ft (0.001 ft/ft in June 2020), as previously observed (**Figure 5**).

The June 2021 hydrocarbon concentrations for each sampled well are shown in **Table 1, Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. Wells MW-4 and MW-5 were not sampled this quarter and will be sampled on semiannual basis. The June 2021 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- Benzene was detected above the NMWQCC standard in well HTRW-1 at 765 µg/L.
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in HTRW-1.
- TPH-GRO was detected above the lower laboratory reporting limit (0.06 mg/L) in well HTRW-1 at 1.70 mg/L.
- TPH-DRO was not detected above the lower laboratory reporting limit (0.147 mg/L) in well HTRW-1.

Concentrations of dissolved hydrocarbons in groundwater during the June 2021 monitoring period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 12**).

September 2021

In September 2021, crude oil was not measured in any of the wells (**Appendix A**).

Water levels measured in September 2021 were generally 0.10 feet lower than water levels measured in June 2021. For the September 2021 monitoring period the groundwater flow (**Figure 6**) was towards the southeast with a gradient of 0.001 ft/ft (0.001 ft/ft in September 2020).

The September 2021 hydrocarbon concentrations for each sampled well are shown in **Table 1**, **Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. Wells MW-4 and MW-5 were not sampled this quarter and will be sampled on semiannual basis. The September 2021 laboratory report is contained **Appendix D.**

The analytical results for this monitoring period are summarized as follows:

- Benzene was detected below the NMWQCC standard in well HTRW-1 at 1.20 µg/L.
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in HTRW-1.
- TPH-GRO was not detected above the lower laboratory reporting limit (0.06 mg/L) in well HTRW-1; and
- TPH-DRO was not detected above the lower laboratory reporting limit (0.551 mg/L) in well HTRW-1.

Concentrations of dissolved hydrocarbons in groundwater during the September 2021 monitoring period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 12**).

December 2021

In December 2021, crude oil was not measured in any of the wells during this quarter (**Appendix A**).

Water levels measured in December 2021 were generally 0.20 feet lower than water levels measured in September 2021. For the December 2021 monitoring period, the groundwater flow (**Figure 7**) was towards the southeast with a gradient of 0.001 ft/ft (0.001 ft/ft in December 2020).

The December 2021 hydrocarbon concentrations for each sampled well are shown in **Table 1**, **Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. The December 2021 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- None of the BTEX constituents were detected above the NMWQCC standards in wells MW-4 and MW-5.
- Benzene was detected below the NMWQCC standard in well HTRW-1 at 2.49 µg/L.
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in well HTRW-1.
- TPH-GRO and TPH-DRO were not detected above the lower laboratory reporting limits in wells MW-4, MW-5, and HTRW-1.

Concentrations of dissolved hydrocarbons in groundwater during the December 2021 monitoring period were not detected in wells above the NMWQCC standards inside and outside the berm area **(Figure 12**).

March 2022

In March 2022, crude oil was not measured in any of the Site wells during this quarter (**Figure 3 and Appendix A**).

Water levels measured in March 2022 were similar to water levels measured in December 2021. Monitoring wells MW-2 and MW-3 were measured as dry. For the March 2022 monitoring period, the groundwater flow (**Figure 8**) was towards the east with a gradient of 0.001 ft/ft (0.001 ft/ft in March 2021).

The March 2022 hydrocarbon concentrations for each sampled well are shown in **Table 1, Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. Only well HTRW-1 was sampled this quarter. The March 2022 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- Benzene was detected above the NMWQCC standard in well HTRW-1 at 585 µg/L.
- Ethylbenzene, toluene, and total xylenes were not detected in well HTRW-1 above the NMWQCC standards.
- TPH-GRO was detected in this well at 1.28 mg/L and TPH-DRO was not detected above the laboratory lower reporting limit of 0.153 mg/L.

Concentrations of dissolved hydrocarbons in groundwater during the March 2022 monitoring period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 12**).

June 2022

In June 2022, crude oil was not measured in any of the wells during this quarter (**Figure 3 and Appendix A**).

Water levels measured in June 2022 were slightly lower than water levels measured in March 2022 and wells MW-2 and MW-3 remained dry. For the June 2022 monitoring period, the groundwater flow was towards the east with a gradient of 0.001 ft/ft (0.001 ft/ft in June 2021), as previously observed (**Figure 9**).

The June 2022 hydrocarbon concentrations for each sampled well are shown in **Table 1, Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. Wells MW-4, MW-5 and HTRW-1 were sampled this quarter. The June 2022 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- Benzene was not detected above the NMWQCC standard in any of the wells.
- Toluene, ethyl-benzene, and total xylenes were not detected above the NMWQCC standards in any of the wells.
- TPH-GRO and TPH-DRO were not detected above the lower laboratory reporting limits an any of the wells.

Concentrations of dissolved hydrocarbons in groundwater during the June 2022 monitoring period were not detected in wells above the NMWQCC standards inside and outside the berm area (**Figure 12**).

September 2022

In September 2022, crude oil was not measured in any of the wells during this quarter (**Figure 3 and Appendix A**).

Water levels measured in September 2022 were approximately 0.20 feet lower than water levels measured in June 2022 and wells MW-2 and MW-3 were dry. For the September 2022 monitoring period the groundwater flow (**Figure 10**) was towards the east with a gradient of 0.001 ft/ft (0.001 ft/ft in September 2020).

The September 2022 hydrocarbon concentrations for each sampled well are shown in **Table 1**, **Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. Wells MW-4 and MW-5 were not sampled this quarter and will be sampled in December. The September 2022 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- Benzene was detected below the NMWQCC standard in well HTRW-1 at 0.429 µg/L.
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in well HTRW-1.
- TPH-GRO was not detected above the lower laboratory reporting limit (0.06 mg/L) and TPH-DRO was detected at 0.321 mg/L in well HTRW-1.

Concentrations of dissolved hydrocarbons in groundwater during the September 2022 monitoring period were not detected in wells above the NMWQCC standards inside and outside the berm area (**Figure 12**).

December 2022

In December 2022, crude oil was not measured in any of the wells during this quarter (**Figure 3 and Appendix A**).

Water levels measured in December 2022 were generally 0.10 feet lower than water levels measured in September 2022. For the December 2022 monitoring period the groundwater flow (**Figure 11**) was towards the east with a gradient of 0.001 ft/ft (0.001 ft/ft in December 2021).

The December 2022 hydrocarbon concentrations for each sampled well are shown in **Table 1**, **Figure 12** and in **Appendix B**. Wells MW-2 and MW-3 were not sampled due to insufficient water in the wells. The December 2022 laboratory report is contained **Appendix D**.

The analytical results for this monitoring period are summarized as follows:

- None of the BTEX constituents were detected above the NMWQCC standards in wells MW-4 and MW-5.
- Benzene was detected below the NMWQCC standard in well HTRW-1 at <1.0 µg/L.

- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in HTRW-1.
- TPH-GRO and TPH-DRO were not detected above the lower laboratory reporting limits in wells MW-4, MW-5, and HTRW-1.

Concentrations of dissolved hydrocarbons in groundwater during the December 2022 monitoring period were not detected in wells above the NMWQCC standards inside and outside the berm area **(Figure 12**).

4. QA/QC Results

Quality Assurance/Quality Control (QA/QC) measures were followed according to the abatement plan. A summary of the QA/QC analytical results is presented in **Table 2** for this reporting period.

Duplicate groundwater samples were collected in December 2022. The duplicate sample was analyzed for BTEX, TPH-GRO, and TPH-DRO. There was no difference in the duplicate results.

Each cooler containing the groundwater samples was shipped to the laboratory with a temperature blank and a laboratory prepared trip blank for June, September, and December 2022. The trip blank samples were analyzed for BTEX and TPH-GRO. There were no detections above the lower laboratory reporting limits for BTEX and TPH-DRO in any of the trip blank samples that were submitted (**Table 2**). All samples were analyzed within the holding times and all coolers were received at the proper temperature. Based on this evaluation, all the data meets acceptance criteria and is suitable for use in this report.

5. Remediation Status

The crude oil from the release has historically been found in the central portion of the Site, in the immediate area of Tank 5201 and inside the tank berm. Crude oil has not been measured in any monitoring wells located outside of this area of the release. Crude oil was recovered from wells using a crude oil only skimmer pump system from September 2013 to December 2015. EFR was used to recover the oil from December 2015 to January 2018 and oil absorbent socks have been used periodically for any *de minimus* remaining oil since 2018. The crude oil thickness in Site wells for March 2022 to December 2022 is shown in **Figure 3** and detailed in **Appendix A**.

Crude oil from the release has not recharged at a recoverable rate since March 2018 and measured crude oil thicknesses have been declining in wells near the release since September 2013 (**Appendix A**). The maximum crude oil thickness measured in well RW-1 was in December 2012 at 3.01 feet and presently does not have any measured crude oil. The maximum crude oil thickness was measured in well MW-1 at 3.62 feet in August 2012 and has not shown any measured crude oil since March 2020 (**Appendix A**). The maximum crude oil thickness in HTRW-3 was measured at 1.70 in December 2015 and has not had any measurable crude oil since June 2020 (**Appendix A**). Crude oil has never been measured in wells HTRW-2 and HTRW-4 since installation of the wells in 2013 and HTRW-1 has not shown any crude oil since October 2016 (**Appendix A**).

The Site total accumulated thickness of the crude oil as measured in all wells for the Site has declined from 8.50 feet in 2013 to 1.72 feet in December 2015, to 0.03 feet in June 2016, to 0.53 feet in December 2016, to 0.04 feet in June 2017 to 0.05 feet in December 2018 to 0.18 feet in December 2019. Since March 2020, there has been no measurable oil in any of the Site wells (**Appendix A**).

In 2021 and 2022, remediation activities for Well HTRW-1 have included the use of Cool-Ox, EFR and air sparging. Five gallons of Cool-Ox (calcium peroxide) was used in well HTRW-1 to clean residual crude oil in the well casing and screen, and the well borehole. EFR was used on wells RW-1 and HTRW-3 to remove impacted groundwater in the area throughout 2022 with approximately 2 barrels of total fluids removed per event. Initially, the removed water from these wells was discolored and with time the water clarity improved considerably. As an additional means to reduce dissolved phase hydrocarbons present in groundwater, an air sparging system was activated in March 2021 for well HTRW-1 with air being pumped into the well continuously. The dissolved phase hydrocarbon concentrations in this well have been declining to below NMWQCC standards since September 2021 showing the effectiveness of the air sparging system (**Appendix C**).

6. Conclusions and Recommendations

The crude oil thickness from the release has declined to none measured due to removal of the crude oil by pumping, the use of EFR and oil absorbent socks since 2012. There has been no measurable crude oil in any of the Site wells since June 2020. Hydrocarbon concentrations, specifically benzene, fluctuated in well HTRW-1 during 2021 and 2022 and sporadically exceeded the NMWQCC standard for benzene. Overall, benzene concentrations have decreased in well HTRW-1 as a result of Site remediation efforts including the use of EFR in the area, Cool-OX and air sparging during 2021 and 2022. Concentrations of dissolved hydrocarbons in groundwater during this reporting period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 12**).

The following items based on discussion with Bradford Billings, NMOCD, in 2021, were addressed in 2022:

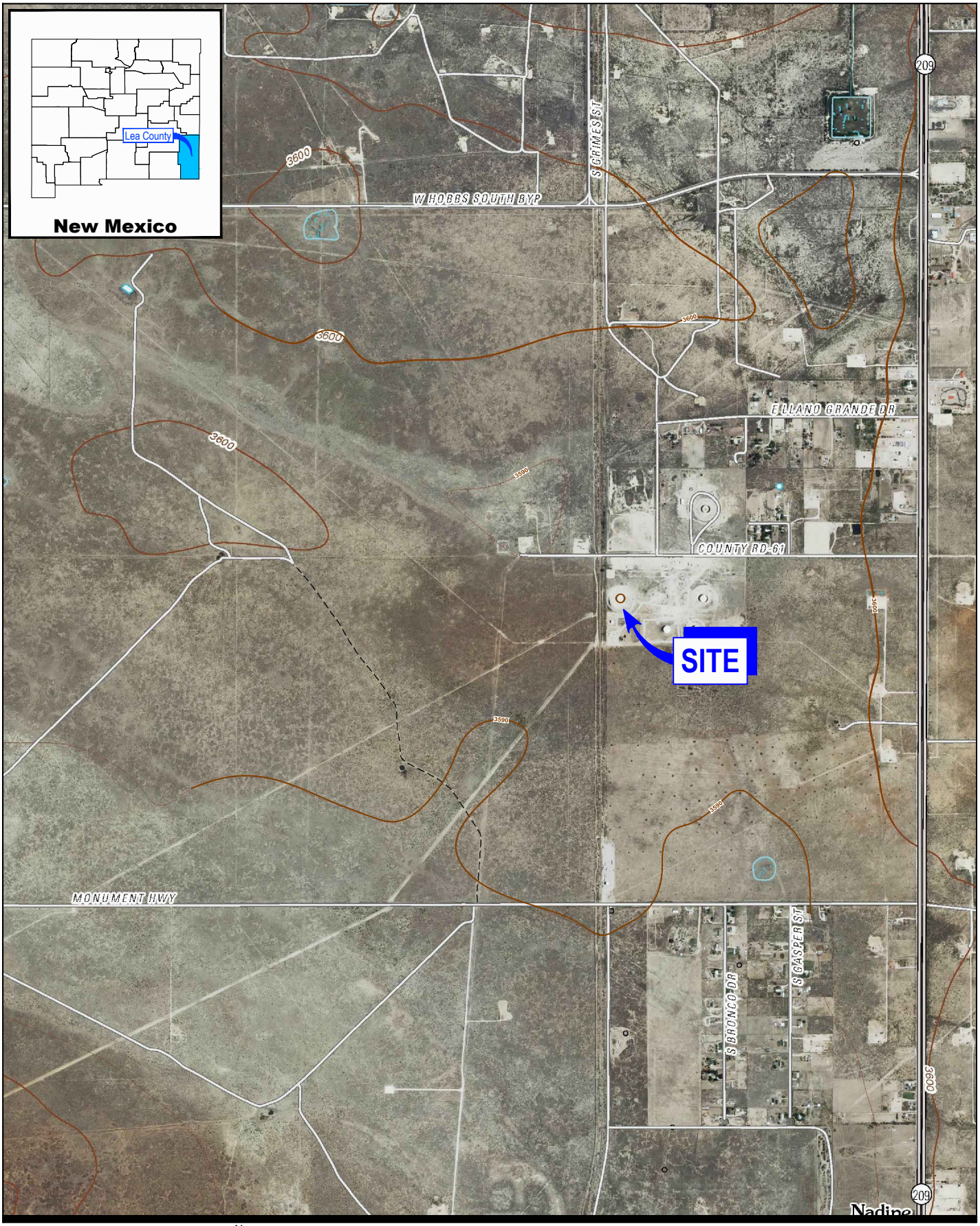
- Reconditioned well HTRW-1 by using air sparging and use of Cool-Ox.
- EFR use for removal of impacted water from wells RW-1 and HTRW-3.
- Well HTRW-1 was sampled quarterly.
- All other wells were sampled semiannually if sufficient water was present.

Recommendations for 2023 include the following;

- Continue air sparging in well HTRW-1.
- Install Oxygen Release Compound (ORC®) socks (regenesis.com) in the same well as the one used for air sparging, HTRW-1 and in wells RW-1, and HTRW-3 to increase biodegradation of hydrocarbons in the area.
- Continue groundwater monitoring at the schedule detailed above until closure requirements are met.

All groundwater samples will continue to be analyzed for BTEX, GRO and DRO. The remedial strategy for site closure is based on the current NMOCD requirements. To close the Site with no further action, the crude oil would first have to be removed separately from groundwater (19.15.17.13 NMAC), which has not been measured in any of the Site wells since June 2020. Since September 2021, benzene concentrations in well HTRW-1 have been below the state standard during five of the six quarterly monitoring events. If benzene concentrations remain below the standard throughout 2023, Site closure will be requested from the NMOCD.

Figures



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Coordinate System:
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New Mexico East (US Feet)

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GHD

HF SINCLAIR
HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

Project No. **11224355**
Date **March 2023**

SITE LOCATION MAP

FIGURE 1

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Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

HF SINCLAIR
HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

Project No. **11224355**
Date **March 2023**

SITE MAP

FIGURE 2

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
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Data Source: Microsoft Product Screen shot(s) Reprinted with permission from Microsoft Corporation
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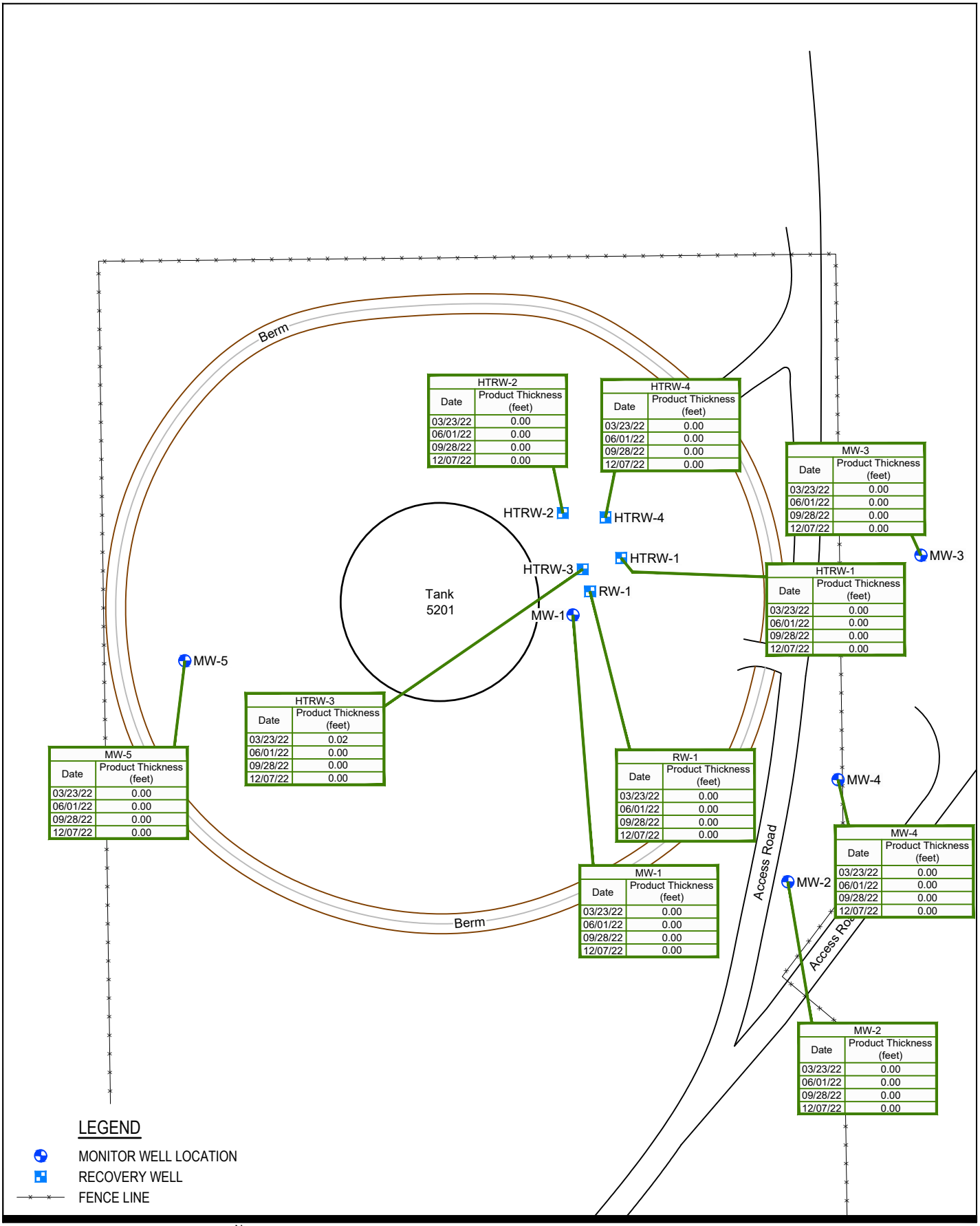

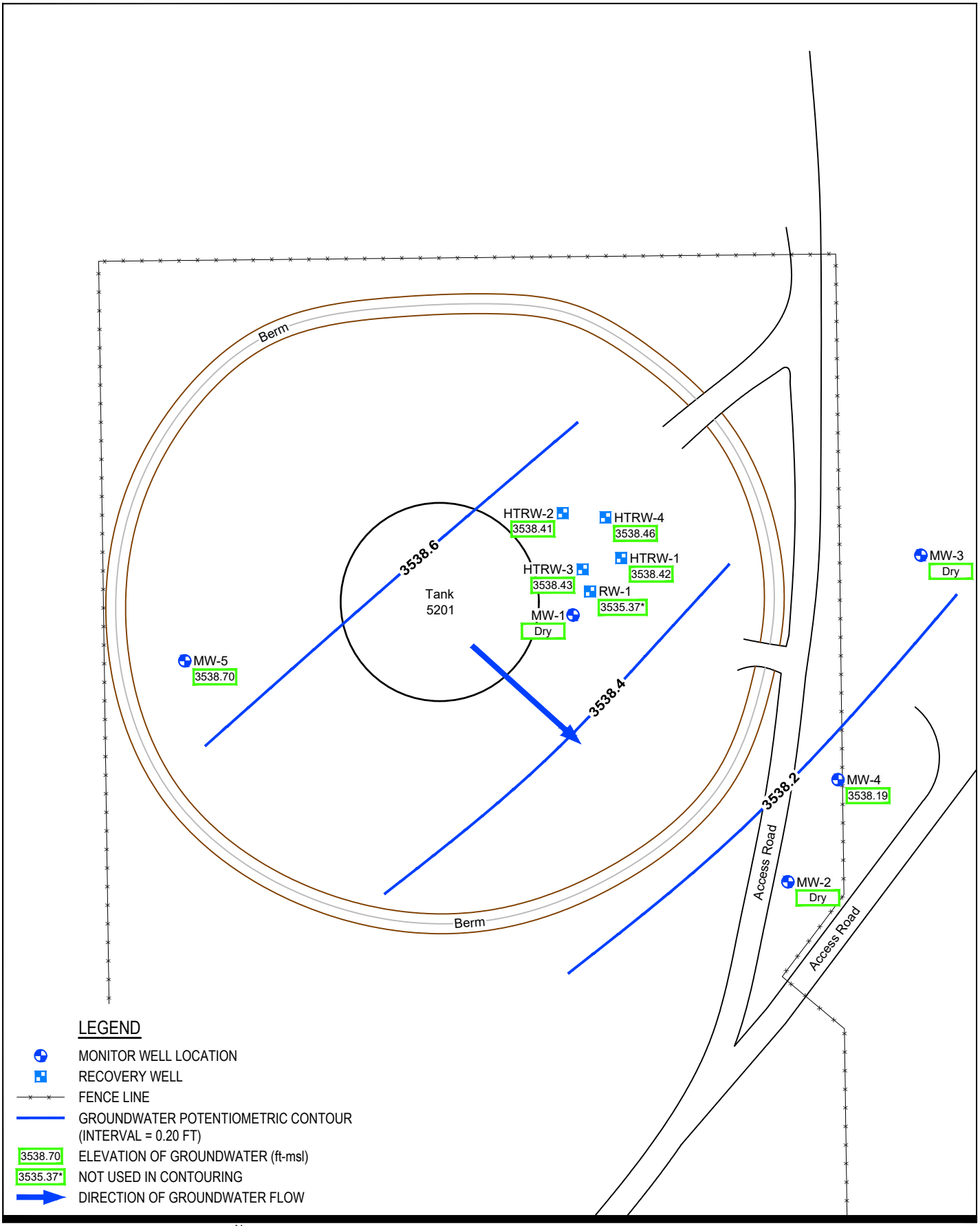

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1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

HF SINCLAIR
HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

GROUNDWATER SURFACE MAP - MARCH 2021

Project No. **11224355**
Date **March 2023**

FIGURE 4

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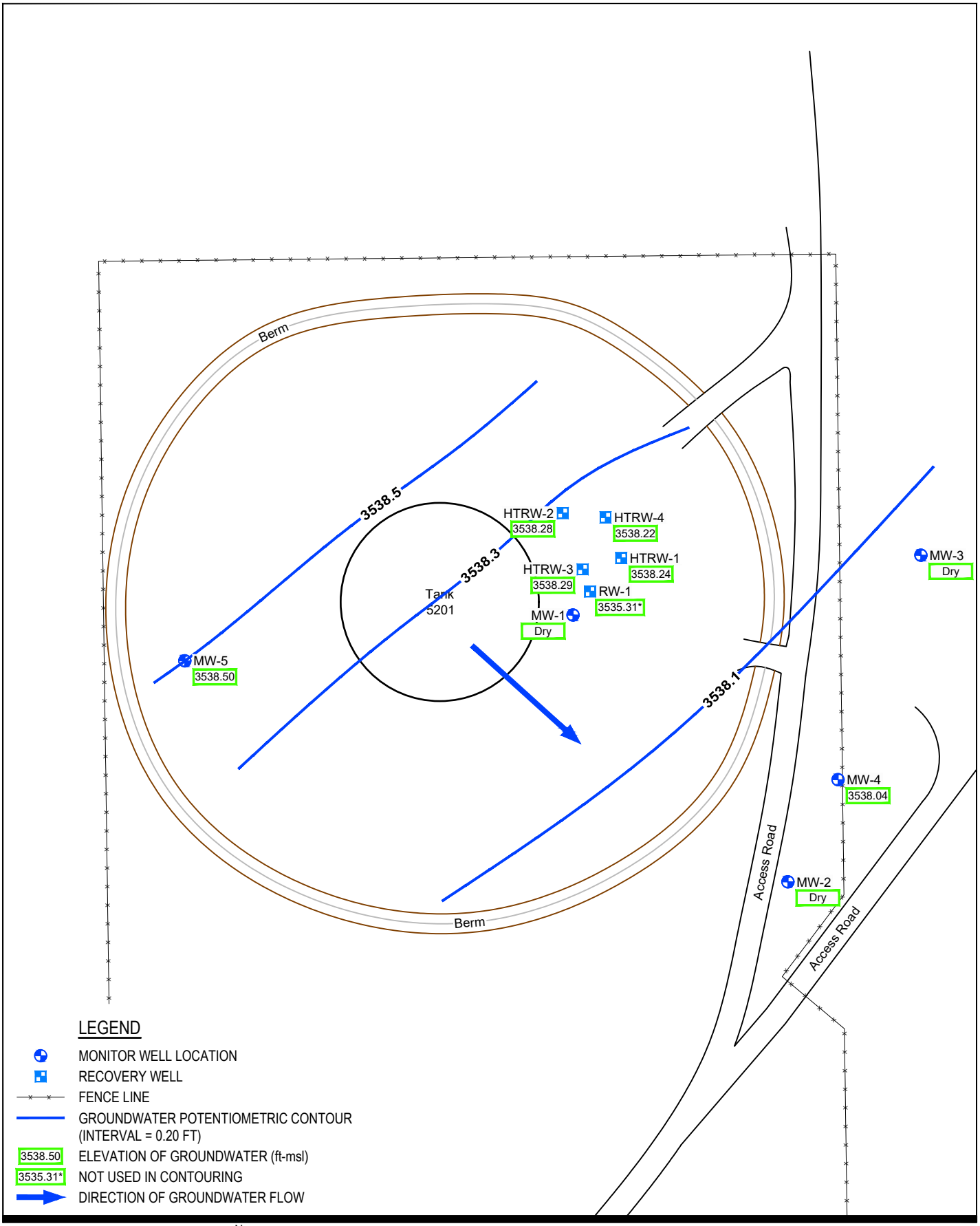


0 40 80 ft
1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

HF SINCLAIR
HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

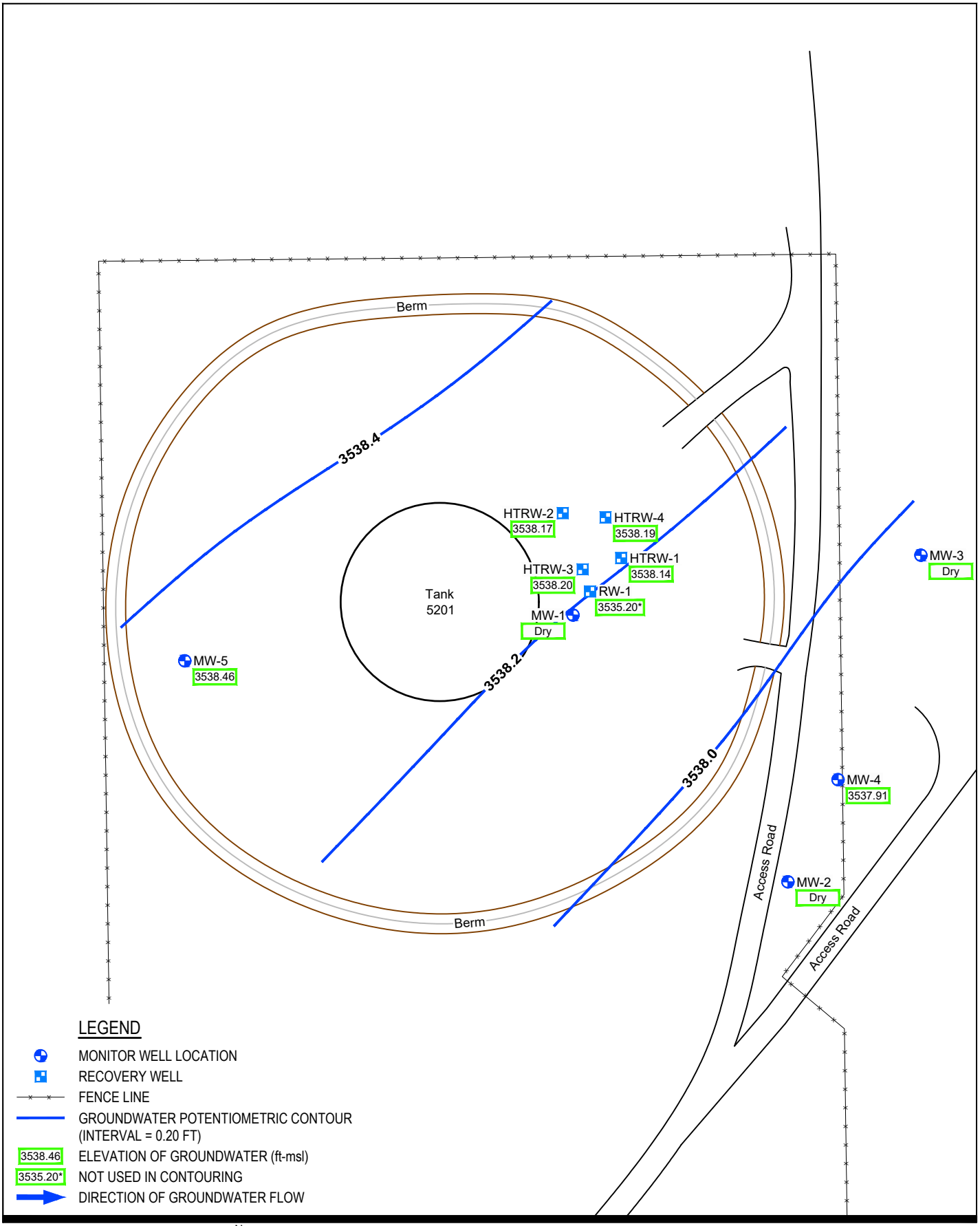
Project No. **11224355**
Date **March 2023**

GROUNDWATER SURFACE MAP - JUNE 2021

FIGURE 5

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 06 March 2023 6:40 PM

Lat/Long: 32.6549° North, 103.1382° West



0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

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HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

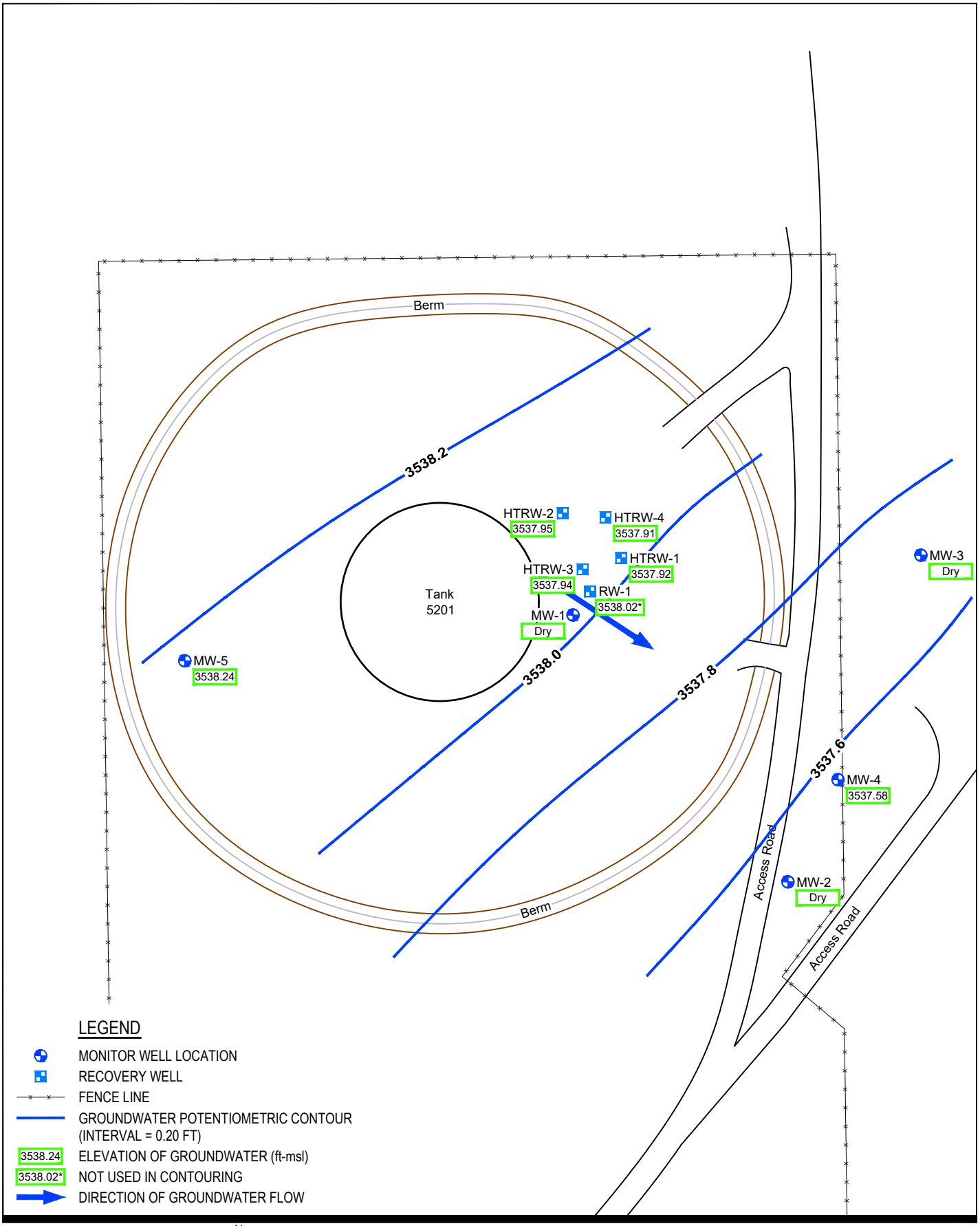
Project No. **11224355**
Date **March 2023**

GROUNDWATER SURFACE MAP - SEPTEMBER 2021

FIGURE 6

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 06 March 2023 6:40 PM

Lat/Long: 32.6549° North, 103.1382° West



0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

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HOBBS, NEW MEXICO
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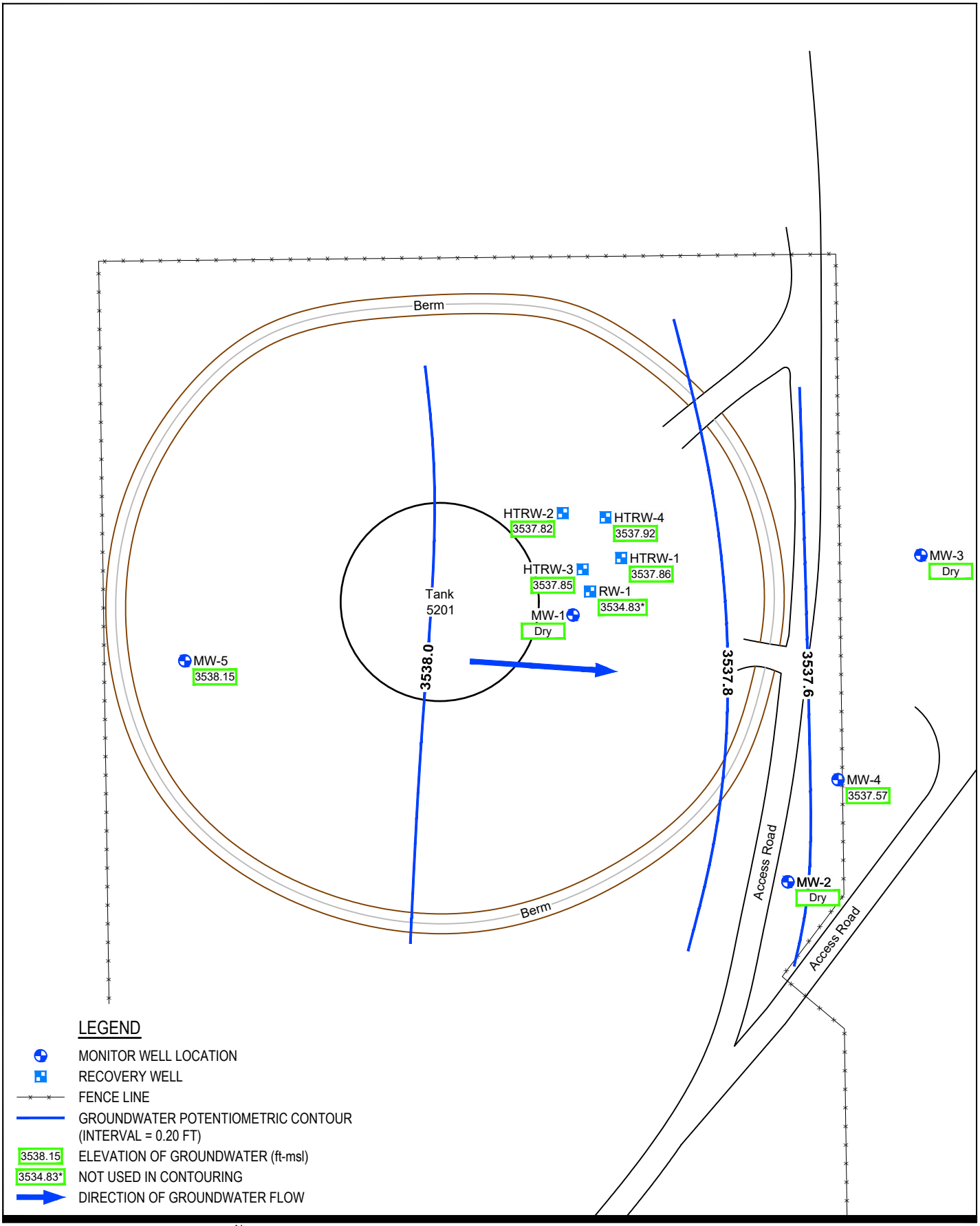
Project No. **11224355**
Date **March 2023**

GROUNDWATER SURFACE MAP - DECEMBER 2021

FIGURE 7

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 06 March 2023 6:39 PM

Lat/Long: 32.6549° North, 103.1382° West



0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

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HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

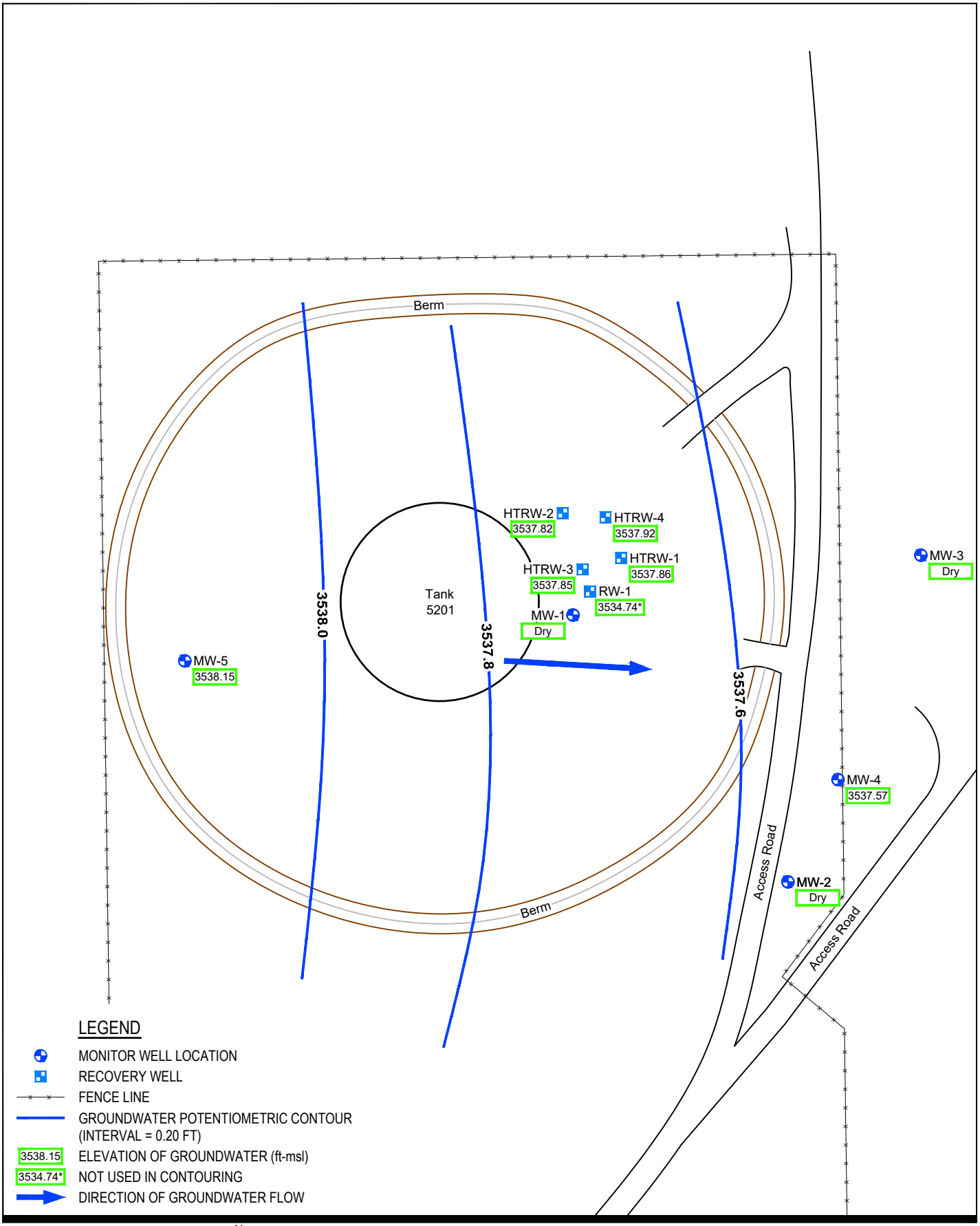
Project No. **11224355**
Date **March 2023**

GROUNDWATER SURFACE MAP - MARCH 2022

FIGURE 8

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 08 March 2023 9:22 AM

Lat/Long: 32.6549° North, 103.1382° West



0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

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HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

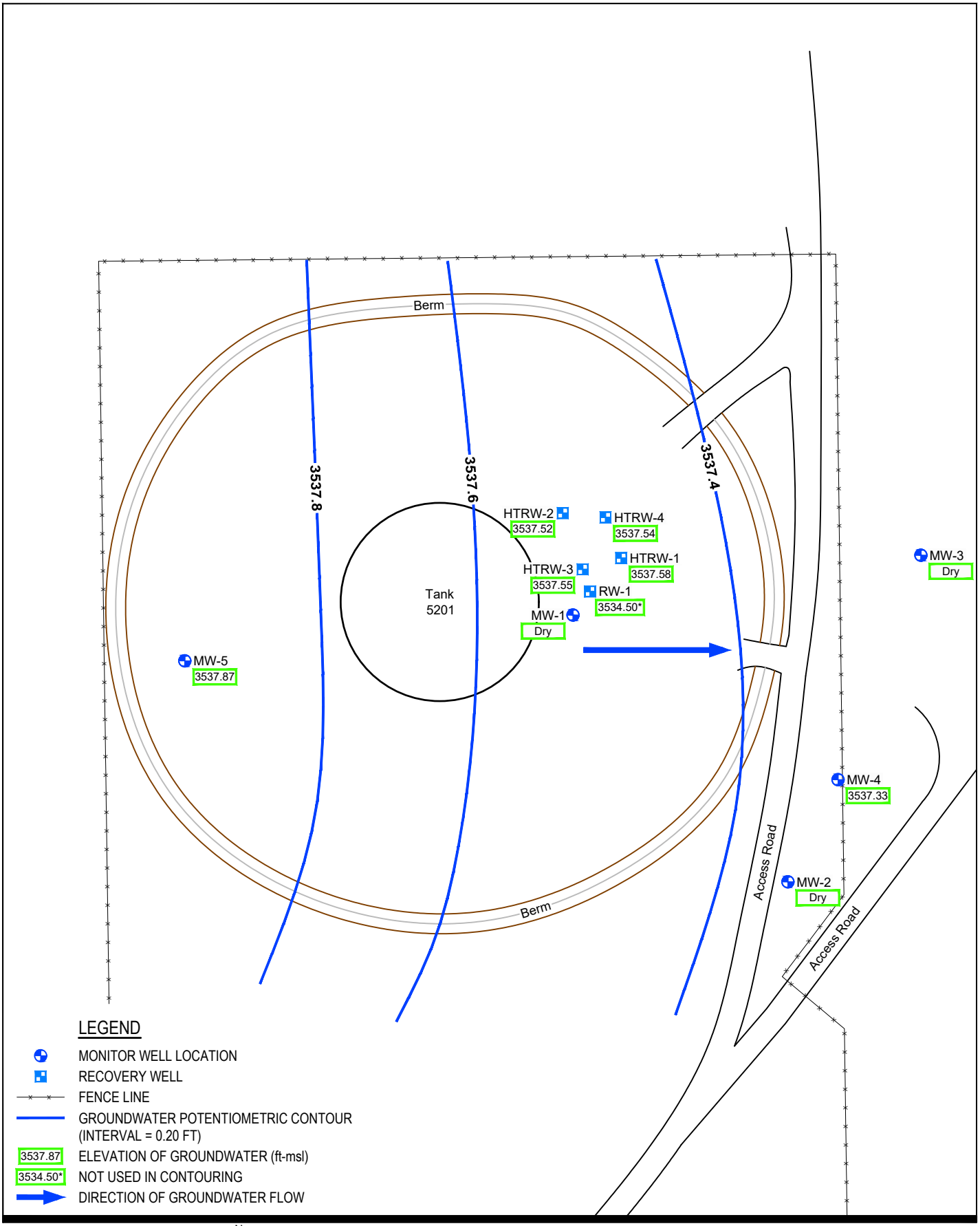
GROUNDWATER SURFACE MAP - JUNE 2022

Project No. **11224355**
Date **March 2023**

FIGURE 9

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 08 March 2023 9:22 AM

Lat/Long: 32.6549° North, 103.1382° West



0 ## #####

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Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

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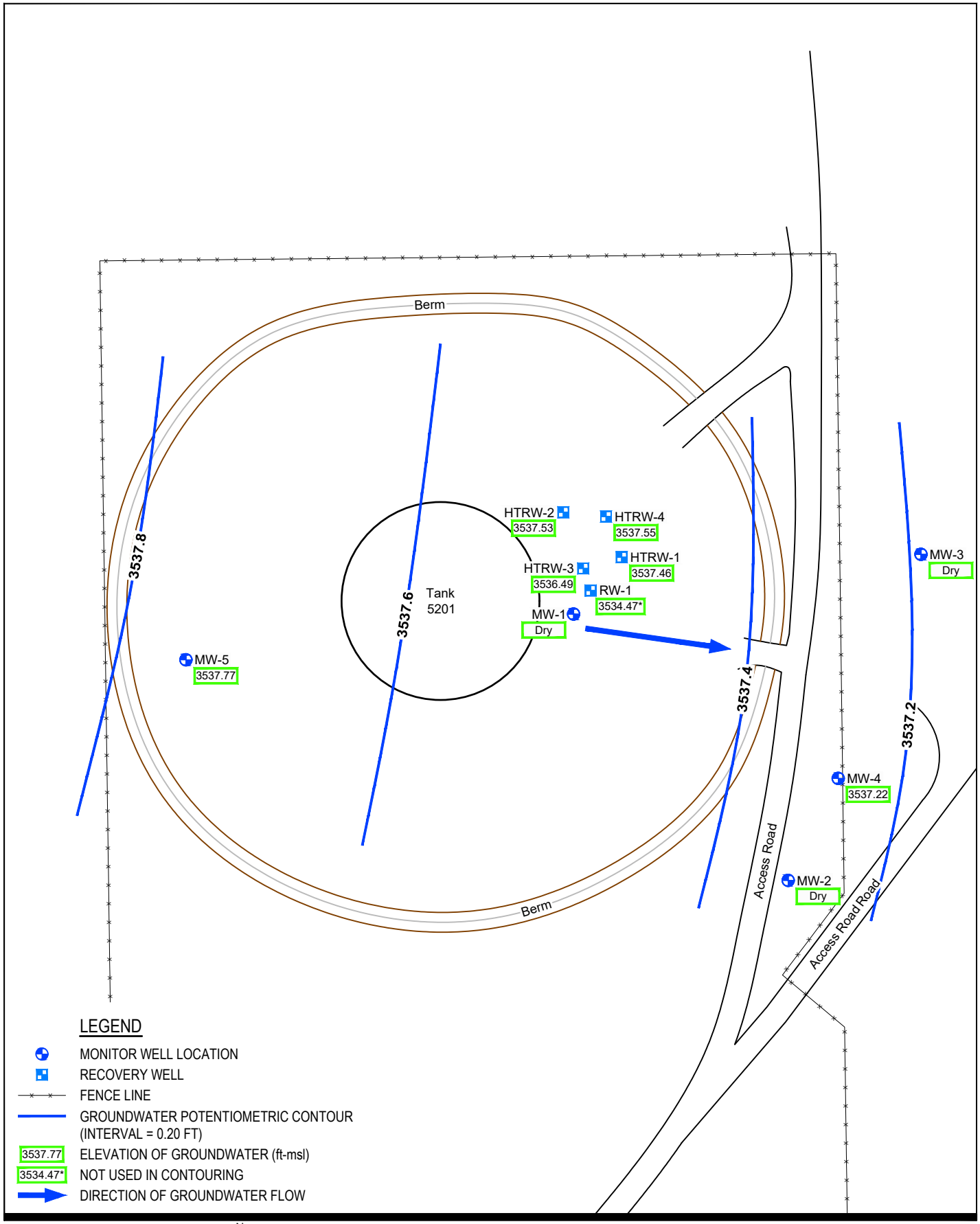
Project No. **11224355**
Date **March 2023**

GROUNDWATER SURFACE MAP - SEPTEMBER 2022

FIGURE 10

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 08 March 2023 9:22 AM

Lat/Long: 32.6549° North, 103.1382° West



0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

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HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

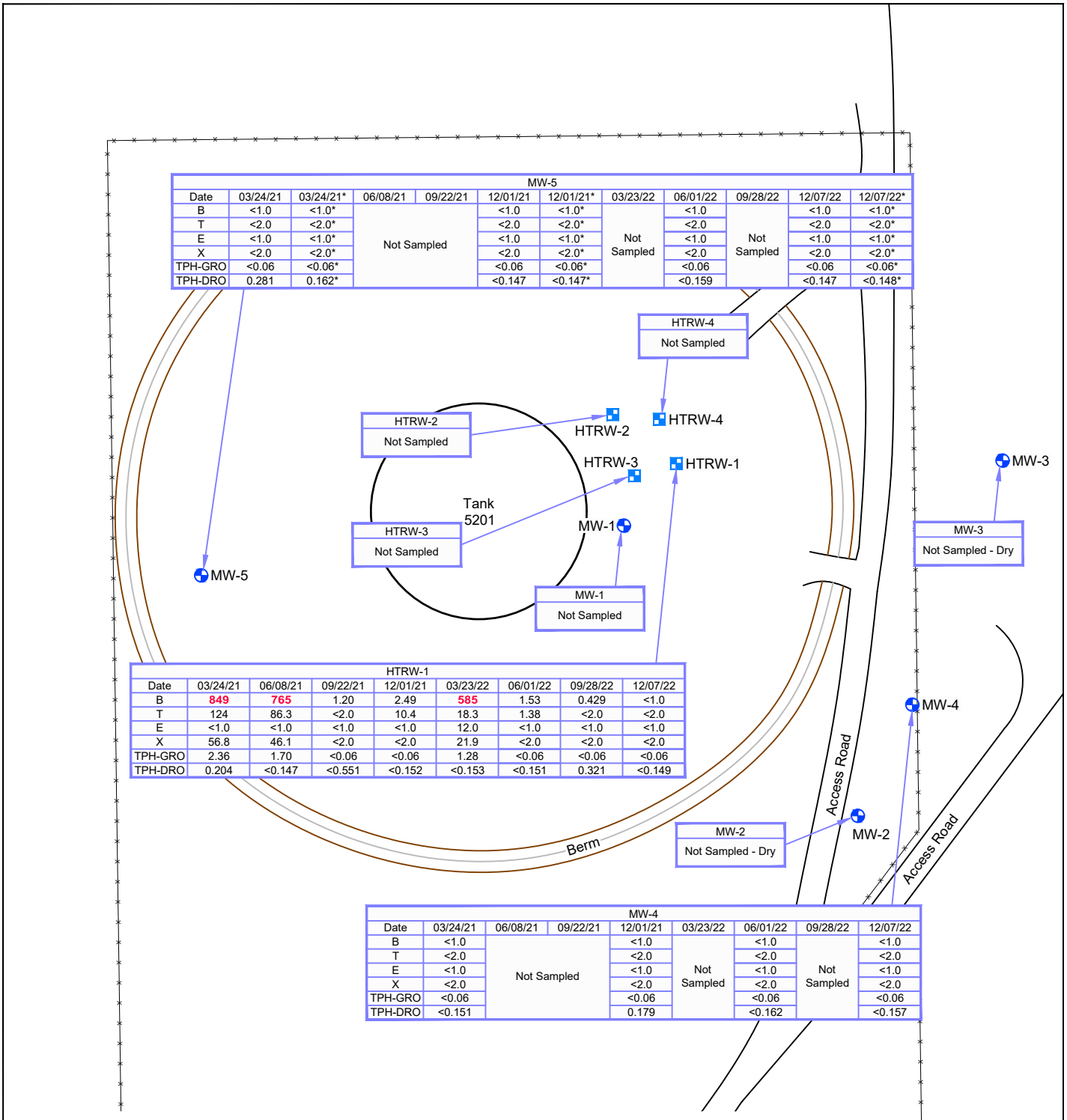
GROUNDWATER SURFACE MAP - DECEMBER 2022

Project No. **11224355**
Date **March 2023**

FIGURE 11

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 08 March 2023 9:21 AM

Lat/Long: 32.6549° North, 103.1382° West



LEGEND

- MONITOR WELL LOCATION
- RECOVERY WELL
- FENCE LINE
- B BENZENE CONCENTRATION (µg/L)
- T TOLUENE CONCENTRATION (µg/L)
- E ETHYLBENZENE CONCENTRATION (µg/L)
- X XYLENES CONCENTRATION (µg/L)
- TPH TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (mg/L)
- GRO TPH AS GASOLINE RANGE ORGANICS
- DRO TPH AS DIESEL RANGE ORGANICS
- * INDICATES DUPLICATE SAMPLE
- 585 INDICATES DUPLICATE SAMPLE

0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

N

GHD

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HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

ANALYTICAL MAP FOR MARCH 2021 TO DECEMBER 2022

Project No. **11224355**
Date **March 2023**

FIGURE 12

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
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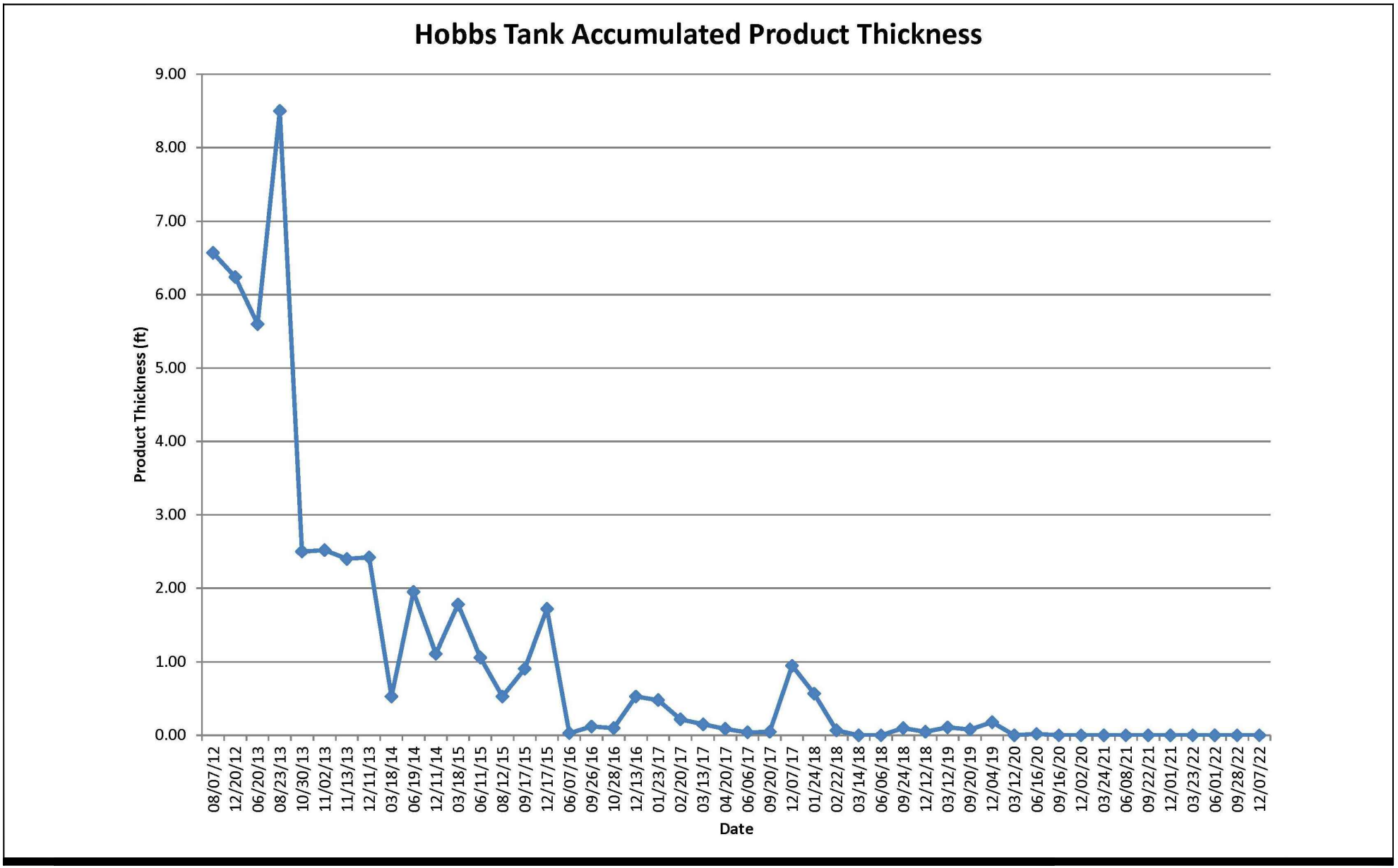
Lat/Long: 32.6549° North, 103.1382° West



HF SINCLAIR
HOBBS, NEW MEXICO
HOBBS STATION TANK 5201

Project No. **11224355**
Date **March 2023**

SITE TOTAL ACCUMULATED CRUDE OIL THICKNESS

FIGURE 13

Filename: \\ghdnet\ghd\US\Golden\Projects\562\11224355\Digital_Design\ACAD 2017\Figures\RPT003\11224355-GHD-00-00-RPT-EN-D101_DL-003.dwg
Plot Date: 06 March 2023 4:10 PM

Tables

Table 1 **Summary of Groundwater Hydrocarbon Results for 2021/2022**
HF Sinclair - Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (ft)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)
NMWQCC Groundwater Standards		5	1000	700	620	NE	NE			
MW-1	03/24/21	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	12/01/21	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	06/01/22	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	dry	dry
	12/07/22	NS	NS	NS	NS	NS	NS	0.00	dry	dry
MW-2	03/24/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	06/08/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	09/22/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	12/01/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	03/23/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	06/01/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	09/28/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	12/07/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
MW-3	03/24/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	06/08/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	09/22/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	12/01/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	03/23/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	06/01/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	09/28/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
	12/07/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	0.00	dry	dry
MW-4	03/24/21	<1.0	<2.0	<1.0	<2.0	<0.06	<0.151	0.00	52.66	3,538.19
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	52.81	3,538.04
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	52.94	3,537.91
	12/01/21	<1.0	<2.0	<1.0	<2.0	<0.06	0.179	0.00	53.27	3,537.58
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	53.28	3,537.57
	06/01/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.162	0.00	53.30	3,537.55
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	53.52	3,537.33
	12/07/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.157	0.00	53.63	3,537.22
MW-5	03/24/21	<1.0	<2.0	<1.0	<2.0	<0.06	0.281	0.00	54.05	3,538.70
duplicate	03/24/21	<1.0	<2.0	<1.0	<2.0	<0.06	0.162	0.00	54.05	3,538.70
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	54.05	3,538.50
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	54.29	3,538.46
	12/01/21	<1.0	<2.0	<1.0	<2.0	<0.06	<0.147	0.00	54.51	3,538.24
duplicate	12/01/21	<1.0	<2.0	<1.0	<2.0	<0.06	<0.147	0.00	54.51	3,538.24
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	54.51	3,538.15
	06/01/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.159	0.00	54.60	3,538.08
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	54.67	3,537.87
	12/07/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.147	0.00	54.88	3,537.77
duplicate	12/07/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.148	0.00	54.98	3,537.77
HTRW-1	03/24/21	849	124	<1.0	56.8	2.36	0.204	0.00	49.72	3,538.42
	06/08/21	765	86.3	<1.0	46.1	1.70	<0.147	0.00	49.90	3,538.24
	09/22/21	1.20	<2.0	<1.0	<2.0	<0.06	<0.551	0.00	50.00	3,538.14
	12/01/21	2.49	10.4	<1.0	<2.0	<0.06	<0.152	0.00	50.22	3,537.92
	03/23/22	585	18.3	12.0	21.9	1.28	<0.153	0.00	50.28	3,537.86
	06/01/22	1.53	1.38	<1.0	<2.0	<0.06	<0.151	0.00	50.34	3,537.80
	09/28/22	0.429	<2.0	<1.0	<2.0	<0.06	0.321	0.00	50.56	3,537.58
	12/07/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.149	0.00	50.68	3,537.46
HTRW-2	03/24/21	NS	NS	NS	NS	NS	NS	0.00	49.10	3,538.41
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	49.23	3,538.28
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	49.34	3,538.17
	12/01/21	NS	NS	NS	NS	NS	NS	0.00	49.56	3,537.95
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	49.69	3,537.82
	06/01/22	NS	NS	NS	NS	NS	NS	0.00	49.76	3,537.75
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	49.99	3,537.52
	12/07/22	NS	NS	NS	NS	NS	NS	0.00	49.98	3,537.53

Table 1 **Summary of Groundwater Hydrocarbon Results for 2021/2022**
HF Sinclair - Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (ft)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)
NMWQCC Groundwater Standards		**5**	**1000**	**700**	**620**	**NE**	**NE**			
HTRW-3	03/24/21	NS	NS	NS	NS	NS	NS	0.02	50.32	3,538.43
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	50.46	3,538.29
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	50.55	3,538.20
	12/01/21	NS	NS	NS	NS	NS	NS	0.00	50.81	3,537.94
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	50.90	3,537.85
	06/01/22	NS	NS	NS	NS	NS	NS	0.00	51.05	3,537.70
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	51.20	3,537.55
	12/07/22	NS	NS	NS	NS	NS	NS	0.00	52.26	3,536.49
HTRW-4	03/24/21	NS	NS	NS	NS	NS	NS	0.00	50.11	3,538.46
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	50.35	3,538.22
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	50.38	3,538.19
	12/01/21	NS	NS	NS	NS	NS	NS	0.00	50.66	3,537.91
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	50.65	3,537.92
	06/01/22	NS	NS	NS	NS	NS	NS	0.00	50.78	3,537.79
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	51.03	3,537.54
	12/07/22	NS	NS	NS	NS	NS	NS	0.00	51.02	3,537.55
RW-1	03/24/21	NS	NS	NS	NS	NS	NS	0.00	53.72	3,535.37
	06/08/21	NS	NS	NS	NS	NS	NS	0.00	53.78	3,535.31
	09/22/21	NS	NS	NS	NS	NS	NS	0.00	53.89	3,535.20
	12/01/21	NS	NS	NS	NS	NS	NS	0.00	54.07	3,535.02
	03/23/22	NS	NS	NS	NS	NS	NS	0.00	54.26	3,534.83
	06/01/22	NS	NS	NS	NS	NS	NS	0.00	54.35	3,534.74
	09/28/22	NS	NS	NS	NS	NS	NS	0.00	54.59	3,534.50
	12/07/22	NS	NS	NS	NS	NS	NS	0.00	54.62	3,534.47

Notes:
BOLD = Exceeds New Mexico Water Quality Commission (NMWQC) Standard
µg/L = microgram per liter
< = Not detected above indicated level
ft-bmp - feet-below measuring point
ft-msl - feet-mean sea level
NSP - Not Sampled Product
NS - Not Sampled
NA - Not Analyzed
NE - Not Established
BTEX = Benzene, Toluene, Ethylbenzene and Xylenes
TPH-GRO = Total Petroleum Hydrocarbons-Gasoline Range Organics
TPH-DRO = Total Petroleum Hydrocarbons-Diesel Range Organics
BTEX analyzed by Method SW8260C
TPH-GRO analyzed by Method 8015V
TPH-DRO analyzed by Method 8015D

Table 2 Summary of Groundwater QA/QC Results for 2022
HF Sinclair - Hobbs Tank 5201 - Lea County, New Mexico

Well No.	Date Sampled	Laboratory Analytical Results					
		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)
NMWQC Groundwater Standards		**5**	**1000**	**700**	**620**	**NE**	**NE**
MW-5	12/07/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.147
	12/07/22	<1.0	<2.0	<1.0	<2.0	<0.06	<0.148
Trip Blank	06/01/22	<1.0	<2.0	<1.0	<1.0	<0.06	NA
Trip Blank	09/28/22	<1.0	<2.0	<1.0	<1.0	<0.06	NA
Trip Blank	12/07/22	<1.0	<2.0	<1.0	<1.0	<0.06	NA

Notes:
(µg/L) = micrograms per liter
mg/L= micrograms per liter
< = Not detected above indicated level
NE - Not Estalished
NA - Not Analyzed
BTEX = Benzene, Toluene, Ethylbenzene and Xylenes
BTEX analyzed by Method EPA 8260C
TPH-GRO = Total Petroleum Hydrocarbons-Gasoline Range Oganics
TPH-DRO = Total Petroleum Hydrocarbons-Diesel Range Oganics
TPH-GRO analyzed by Method 8015V
TPH-DRO analyzed by Method 8015D
Mercury analyzed by Method SW7470A
Chloride, Nitrate and Sulfate analyzed by Method E300
Bicarbonate analyzed by Method M2320B
TDS analyzed by Method M2540C
All other metals analyzed by Method SW6020A

Appendix A
Summary of Historical Fluid Levels

Appendix A Summary of Fluid Levels
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Well ID/MP Elevation	Date	DTP (ft-bmp)	DTW (ft-bmp)	Prod. Thick (ft)	TD (ft-bmp)	Groundwater Elevation (ft-msl)	Corrected Groundwater Elevation[1] (ft-msl)	Totalizer (gals)
RW-1	08/07/12	48.06	51.01	2.95	58.19	3538.08	3,540.23	
3589.09	12/20/12	48.47	51.48	3.01		3537.61	3,539.81	
	06/20/13	48.89	51.65	2.76		3537.44	3,539.45	
	08/23/13	49.05	51.95	2.90		3537.14	3,539.26	0
	10/30/13					0.00	3,589.09	
	11/02/13							9.7
	11/13/13							9.9
	12/11/13	49.69	49.70	0.01		3539.39	3,539.40	10.0
	03/18/14		49.92	0.00		3539.17	3,539.17	11.1
	06/19/14	50.19	50.20	0.01		3538.89	3,538.90	13.1
	12/11/14	50.41	50.47	0.06		3538.62	3,538.66	
	03/18/15	50.60	50.73	0.13		3538.36	3,538.45	
	06/11/15	trace	50.75	0.00		3538.34	3538.34	
	08/12/15		50.93	0.00		3538.16	3,538.16	
	09/17/15		51.02	0.00		3538.07	3,538.07	
	12/17/15	trace	50.92	0.00		3538.17	3538.17	
	06/07/16		51.32	0.00		3537.77	3,537.77	
	09/26/16		50.98	0.00		3538.11	3,538.11	
	10/28/16		50.96	0.00		3538.13	3,538.13	
	12/13/16		51.46	0.00		3537.63	3,537.63	
	01/23/17		51.55	0.00		3537.54	3,537.54	
	02/20/17		51.65	0.00		3537.44	3,537.44	
	03/13/17		51.60	0.00		3537.49	3,537.49	
	04/20/17		51.61	0.00		3537.48	3,537.48	
	06/06/17		51.71	0.00		3537.38	3,537.38	
	09/20/17		51.79	0.00		3537.30	3,537.30	
	12/07/17		51.91	0.00		3537.18	3,537.18	
	01/24/18	51.99	52.04	0.05		3537.05	3,537.09	
	02/22/18		52.06	0.00		3537.03	3,537.03	
	03/14/18		52.06	0.00		3537.03	3,537.03	
	06/06/18		51.25	0.00		3537.84	3,537.84	
	09/24/18		52.48	0.00		3536.61	3,536.61	
	12/12/18		52.48	0.00		3536.61	3,536.61	
	03/12/19	52.64	52.66	0.02		3536.43	3,536.44	
	09/20/19		52.95	0.00		3536.14	3,536.14	
	12/04/19		53.10	0.00		3535.99	3,535.99	
	03/12/20		53.19	0.00		3535.90	3,535.90	
	06/16/20		53.30	0.00		3535.79	3,535.79	
	09/16/20		53.43	0.00		3535.66	3,535.66	
	12/02/20		53.76	0.00		3535.33	3,535.33	
	03/24/21		53.72	0.00		3535.37	3,535.37	
	06/08/21		53.78	0.00		3535.31	3,535.31	
	09/22/21		53.89	0.00		3535.20	3,535.20	
	12/01/21		54.07	0.00		3535.02	3,535.02	
	03/23/22		54.26	0.00		3534.83	3,534.83	
	06/01/22		54.35	0.00		3534.74	3,534.74	
	09/28/22		54.59	0.00		3534.50	3,534.50	
	12/07/22		54.62	0.00		3534.47	3,534.47	
MW-1	08/07/12	47.88	51.50	3.62	52.59	3540.55	3,543.19	
3592.05	12/20/12	48.32	51.55	3.23		3540.50	3,542.86	
	06/20/13	48.68	51.50	2.82		3540.55	3,542.61	
	10/30/13	48.96	51.53	2.57		3540.52	3,542.40	
	11/02/13	49.04	51.54	2.50		3540.51	3,542.34	
	11/13/13	49.06	51.58	2.52		3540.47	3,542.31	
	12/11/13	49.15	51.55	2.40		3540.50	3,542.25	
	06/19/14	49.65	51.59	1.94		3540.46	3,541.88	
	12/11/14	50.26	51.26	1.00		3540.79	3,541.52	
	03/18/15	50.39	51.71	1.32		3540.34	3541.30	
	06/11/15		50.66	0.00		3541.39	3541.39	
	08/12/15	50.79	51.32	0.53		3540.73	3541.12	
	09/17/15		51.12	0.00		3540.93	3540.93	
	12/17/15		50.87	0.00		3541.18	3541.18	
	06/07/16		51.22	0.00		3540.83	3540.83	
	09/26/16		50.90	0.00		3541.15	3541.15	
	10/28/16		50.92	0.00		3541.13	3541.13	
	12/13/16	51.38	51.40	0.02		3540.65	3540.66	
	01/23/17	51.49	51.52	0.03		3540.53	3540.55	
	02/20/17		51.55	0.00		3540.50	3540.50	
	03/13/17		51.58	0.00		3540.47	3540.47	
	04/20/17		51.65	0.00		3540.40	3540.40	
	06/06/17		51.72	0.00		3540.33	3540.33	
	09/20/17		51.73	0.00		3540.32	3540.32	
	12/07/17	51.83	52.03	0.20		3540.02	3540.17	
	01/24/18	51.98	52.00	0.02		3540.05	3540.06	
	02/22/18		52.52	0.00		3539.53	3539.53	
	03/14/18		52.60	0.00		3539.45	3539.45	
	06/06/18		52.20	0.00		3539.85	3539.85	
	09/24/18		52.35	0.00		3539.70	3539.70	
	12/12/18		52.37	0.00		3539.68	3539.68	
	03/12/19	52.65	52.68	0.03		3539.37	3539.39	
	09/20/19	53.00	53.08	0.08		3538.97	3539.03	
	12/04/19	53.10	53.28	0.18		3538.77	3538.90	
	03/12/20	53.10	53.17	0.07		3538.88	3538.93	
	06/16/20		53.20	0.00		3538.85	3538.85	
	09/16/20		53.19	0.00		3538.86	3538.86	
	12/02/20		53.32	0.00		3538.73	3538.73	
	03/24/21		dry	0.00		dry	dry	
	06/08/21		dry	0.00		dry	dry	
	09/22/21		dry	0.00		dry	dry	
	12/01/21		dry	0.00		dry	dry	
	03/23/22		dry	0.00		dry	dry	
	06/01/22		dry	0.00		dry	dry	
	09/28/22		dry	0.00		dry	dry	
	12/07/22		dry	0.00		dry	dry	

Appendix A Summary of Fluid Levels
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Well ID/MP Elevation	Date	DTP (ft-bmp)	DTW (ft-bmp)	Prod. Thick (ft)	TD (ft-bmp)	Groundwater Elevation (ft-msl)	Corrected Groundwater Elevation[1] (ft-msl)	Totalizer (gals)
MW-2	08/07/12		47.44	0.00	52.42	3543.41		
3590.85	12/20/12		47.90	0.00		3542.95		
	06/25/13		48.27	0.00		3542.58		
	12/11/13		48.74	0.00		3542.11		
	06/19/14		49.19	0.00		3541.66		
	12/11/14		49.40	0.00		3541.45		
	03/18/15		49.63	0.00		3541.22		
	06/11/15		49.75	0.00		3541.10		
	12/16/15		49.91	0.00		3540.94		
	06/07/16		50.32	0.00		3540.53		
	12/13/16		50.34	0.00		3540.51		
	06/06/17		50.67	0.00		3540.18		
	09/20/17		50.67	0.00		3540.18		
	12/07/17		50.91	0.00		3539.94		
	03/14/18		51.00	0.00		3539.85		
	06/06/18		51.22	0.00		3539.63		
	09/24/18		51.38	0.00		3539.47		
	12/12/18		51.50	0.00		3539.35		
	03/12/19		51.62	0.00		3539.23		
	09/20/19		51.87	0.00		3538.98		
	12/04/19		51.95	0.00		3538.90		
	03/12/20		52.05	0.00		3538.80		
	06/16/20		52.16	0.00		3538.69		
	09/16/20		52.38	0.00		3538.47		
	12/02/20		52.40	0.00		3538.45		
	03/24/21		dry	0.00		dry		
	06/08/21		dry	0.00		dry		
	09/22/21		dry	0.00		dry		
	12/01/21		dry	0.00		dry		
	03/23/22		dry	0.00		dry		
	06/01/22		dry	0.00		dry		
	09/28/22		dry	0.00		dry		
	12/07/22		dry	0.00		dry		
MW-3	08/07/12		47.43	0.00	53.20	3543.38		
3590.81	12/20/12		47.87	0.00		3542.94		
	06/25/13		48.28	0.00		3542.53		
	12/11/13		48.73	0.00		3542.08		
	06/19/14		49.20	0.00		3541.61		
	12/11/14		49.41	0.00		3541.40		
	03/18/15		49.63	0.00		3541.18		
	06/11/15		49.78	0.00		3541.03		
	12/16/15		49.96	0.00		3540.85		
	06/07/16		50.33	0.00		3540.48		
	12/13/16		50.38	0.00		3540.43		
	06/06/17		50.68	0.00		3540.13		
	09/20/17		50.43	0.00		3540.38		
	12/07/17		50.91	0.00		3539.90		
	03/14/18		51.03	0.00		3539.78		
	06/06/18		51.24	0.00		3539.57		
	09/24/18		51.43	0.00		3539.38		
	12/12/18		51.55	0.00		3539.26		
	03/12/19		51.62	0.00		3539.19		
	09/20/19		51.88	0.00		3538.93		
	12/04/19		51.98	0.00		3538.83		
	03/12/20		52.10	0.00		3538.71		
	06/16/20		52.20	0.00		3538.61		
	09/16/20		52.39	0.00		3538.42		
	12/02/20		52.58	0.00		3538.23		
	03/24/21		52.70	0.00		3538.11		
	06/08/21		dry	0.00		dry		
	09/22/21		dry	0.00		dry		
	12/01/21		52.98	0.00		3537.83		
	03/23/22		dry	0.00		dry		
	06/01/22		dry	0.00		dry		
	09/28/22		dry	0.00		dry		
	12/07/22		dry	0.00		dry		
MW-4	08/07/12		47.44	0.00	62.58	3543.41		
3590.85	12/20/12		47.89	0.00		3542.96		
	06/25/13		48.27	0.00		3542.58		
	12/11/13		48.72	0.00		3542.13		
	06/19/14		49.18	0.00		3541.67		
	12/11/14		49.45	0.00		3541.40		
	03/18/15		49.61	0.00		3541.24		
	06/11/15		49.80	0.00		3541.05		
	12/16/15		49.95	0.00		3540.90		
	06/07/16		50.32	0.00		3540.53		
	12/13/16		50.38	0.00		3540.47		
	06/06/17		50.68	0.00		3540.17		
	09/20/17		50.68	0.00		3540.17		
	12/07/17		50.91	0.00		3539.94		
	03/14/18		51.02	0.00		3539.83		
	06/06/18		51.24	0.00		3539.61		
	09/24/18		51.41	0.00		3539.44		
	12/12/18		51.44	0.00		3539.41		
	03/12/19		51.59	0.00		3539.26		
	09/20/19		51.92	0.00		3538.93		
	12/04/19		51.95	0.00		3538.90		
	03/12/20		52.06	0.00		3538.79		
	06/16/20		52.17	0.00		3538.68		
	09/16/20		52.32	0.00		3538.53		
	12/02/20		52.49	0.00		3538.36		
	03/24/21		52.66	0.00		3538.19		
	06/08/21		52.81	0.00		3538.04		
	09/22/21		52.94	0.00		3537.91		
	12/01/21		53.27	0.00		3537.58		
	03/23/22		53.28	0.00		3537.57		
	06/01/22		53.30	0.00		3537.55		
	09/28/22		53.52	0.00		3537.33		
	12/07/22		53.63	0.00		3537.22		

Appendix A Summary of Fluid Levels
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Well ID/MP Elevation	Date	DTP (ft-bmp)	DTW (ft-bmp)	Prod. Thick (ft)	TD (ft-bmp)	Groundwater Elevation (ft-msl)	Corrected Groundwater Elevation[1] (ft-msl)	Totalizer (gals)
MW-5	08/07/12		48.83	0.00	58.82	3543.92		
3592.75	12/20/12		49.26	0.00		3543.49		
	06/25/13		49.64	0.00		3543.11		
	12/11/13		50.09	0.00		3542.66		
	06/19/14		50.53	0.00		3542.22		
	12/11/14		50.76	0.00		3541.99		
	03/18/15		50.99	0.00		3541.76		
	06/11/15		51.12	0.00		3541.63		
	12/17/15		51.33	0.00		3541.42		
	06/07/16		51.68	0.00		3541.07		
	12/13/16		51.76	0.00		3540.99		
	06/06/17		52.08	0.00		3540.67		
	09/20/17		52.07	0.00		3540.68		
	12/07/17		52.30	0.00		3540.45		
	03/14/18		52.38	0.00		3540.37		
	06/06/18		52.58	0.00		3540.17		
	09/24/18		52.50	0.00		3540.25		
	12/12/18		52.54	0.00		3540.21		
	03/12/19		52.97	0.00		3539.78		
	09/20/19		53.22	0.00		3539.53		
	12/04/19		53.34	0.00		3539.41		
	03/12/20		53.40	0.00		3539.35		
	06/16/20		53.58	0.00		3539.17		
	09/16/20		53.69	0.00		3539.06		
	12/02/20		53.91	0.00		3538.84		
	03/24/21		54.05	0.00		3538.70		
	06/08/21		54.25	0.00		3538.50		
	09/22/21		54.29	0.00		3538.46		
	12/01/21		54.51	0.00		3538.24		
	03/23/22		54.60	0.00		3538.15		
	06/01/22		54.67	0.00		3538.08		
	09/28/22		56.88	0.00		3535.87		
	12/07/22		54.98	0.00		3537.77		
HTRW-1	06/25/13	45.27	45.28	0.01	60.10	3542.86	3,542.87	
3588.14	12/11/13	45.78	45.79	0.01		3542.35	3,542.36	
	06/19/14		46.19	0.00		3541.95	3,541.95	
	12/11/14	45.46	45.51	0.05		3542.63	3,542.67	
	03/18/15	46.64	46.66	0.02		3541.48	3,541.49	
	06/11/15	46.81	47.61	0.80		3540.53	3,541.11	
	08/12/15		46.91	0.00		3541.23	3,541.23	
	09/17/15		46.98	0.00		3541.16	3,541.16	
	12/17/15	46.93	46.95	0.02		3541.19	3,541.20	
	06/07/16		46.34	0.00		3541.80	3,541.80	
	09/26/16		46.97	0.00		3541.17	3,541.17	
	10/28/16	46.94	46.95	0.01		3541.19	3,541.20	
	12/13/16		47.44	0.00		3540.70	3,540.70	
	01/23/17		47.58	0.00		3540.56	3,540.56	
	02/20/17		47.68	0.00		3540.46	3,540.46	
	03/13/17		47.62	0.00		3540.52	3,540.52	
	04/20/17		47.67	0.00		3540.47	3,540.47	
	06/06/17		47.71	0.00		3540.43	3,540.43	
	09/20/17		47.72	0.00		3540.42	3,540.42	
	12/07/17		NM	NM		NM	NM	
	01/24/18		48.04	0.00		3540.10	3,540.10	
	02/22/18		48.08	0.00		3540.06	3,540.06	
	03/14/18		48.03	0.00		3540.11	3,540.11	
	06/06/18		48.22	0.00		3539.92	3,539.92	
	09/24/18		48.45	0.00		3539.69	3,539.69	
	12/12/18		48.99	0.00		3539.15	3,539.15	
	03/12/19		48.70	0.00		3539.44	3,539.44	
	09/20/19		48.97	0.00		3539.17	3,539.17	
	12/04/19		48.97	0.00		3539.17	3,539.17	
	03/12/20		49.09	0.00		3539.05	3,539.05	
	06/16/20		49.20	0.00		3538.94	3,538.94	
	09/16/20		49.38	0.00		3538.76	3,538.76	
	12/02/20		49.56	0.00		3538.58	3,538.58	
	03/24/21		49.72	0.00		3538.42	3,538.42	
	06/08/21		49.90	0.00		3538.24	3,538.24	
	09/22/21		50.00	0.00		3538.14	3,538.14	
	12/01/21		50.22	0.00		3537.92	3,537.92	
	03/23/22		50.28	0.00		3537.86	3,537.86	
	06/01/22		50.34	0.00		3537.80	3,537.80	
	09/28/22		50.56	0.00		3537.58	3,537.58	
	12/07/22		50.68	0.00		3537.46	3,537.46	

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HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Well ID/MP Elevation	Date	DTP (ft-bmp)	DTW (ft-bmp)	Prod. Thick (ft)	TD (ft-bmp)	Groundwater Elevation (ft-msl)	Corrected Groundwater Elevation[1] (ft-msl)	Totalizer (gals)
HTRW-2	06/25/13		44.60	0.00	60.14	3542.91		
3587.51	12/11/13		45.05	0.00		3542.46		
	06/19/14		45.52	0.00		3541.99		
	12/11/14		45.79	0.00		3541.72		
	03/18/15		45.95	0.00		3541.56		
	06/11/15		46.05	0.00		3541.46		
	08/12/15		46.22	0.00		3541.29		
	09/17/15		46.30	0.00		3541.21		
	12/17/15		46.25	0.00		3541.26		
	06/07/16		46.66	0.00		3540.85		
	09/26/16		46.20	0.00		3541.31		
	10/28/16		46.18	0.00		3541.33		
	12/13/16		46.74	0.00		3540.77		
	01/23/17		46.90	0.00		3540.61		
	02/20/17		46.88	0.00		3540.63		
	03/13/17		46.93	0.00		3540.58		
	04/20/17		46.96	0.00		3540.55		
	06/06/17		47.03	0.00		3540.48		
	09/20/17		47.08	0.00		3540.43		
	12/07/17		47.25	0.00		3540.26		
	01/24/18		48.68	0.00		3538.83		
	02/22/18		47.38	0.00		3540.13		
	03/14/18		48.42	0.00		3539.09		
	06/06/18		47.56	0.00		3539.95		
	09/24/18		47.77	0.00		3539.74		
	12/12/18		47.79	0.00		3539.72		
	03/12/19		48.01	0.00		3539.50		
	09/20/19		48.28	0.00		3539.23		
	12/04/19		48.35	0.00		3539.16		
	03/12/20		48.47	0.00		3539.04		
	06/16/20		48.59	0.00		3538.92		
	09/16/20		48.68	0.00		3538.83		
	12/02/20		48.89	0.00		3538.62		
	03/24/21		49.10	0.00		3538.41		
	06/08/21		49.23	0.00		3538.28		
	09/22/21		49.34	0.00		3538.17		
	12/01/21		49.56	0.00		3537.95		
	03/23/22		49.69	0.00		3537.82		
	06/01/22		49.76	0.00		3537.75		
	09/28/22		49.99	0.00		3537.52		
	12/07/22		49.98	0.00		3537.53		

Appendix A Summary of Fluid Levels
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Well ID/MP Elevation	Date	DTP (ft-bmp)	DTW (ft-bmp)	Prod. Thick (ft)	TD (ft-bmp)	Groundwater Elevation (ft-msl)	Corrected Groundwater Elevation[1] (ft-msl)	Totalizer (gals)
HTRW-3	06/25/13	45.87	45.88	0.01	60.14	3542.87	3,542.88	
3588.75	12/11/13	46.32	46.33			3542.42	3,542.43	
	06/19/14		46.79	0.00		3541.96	3,541.96	
	12/11/14		47.03	0.00		3541.72	3,541.72	
	03/18/15	47.19	47.50	0.31		3541.25	3,541.48	
	06/11/15	47.35	47.61	0.26		3541.14	3,541.33	
	08/12/15		47.60	0.00		3541.15	3,541.15	
	09/17/15	47.47	48.38	0.91		3540.37	3,541.03	
	12/17/15	47.30	49.00	1.70		3539.75	3,540.99	
	06/07/16	47.81	47.84	0.03		3540.91	3,540.93	
	09/26/16	47.48	47.60	0.12		3541.15	3,541.24	
	10/28/16	47.46	47.55	0.09		3541.20	3,541.27	
	12/13/16	47.97	48.48	0.51		3540.27	3,540.64	
	01/23/17	48.10	48.55	0.45		3540.20	3,540.53	
	02/20/17	48.28	48.50	0.22		3540.25	3,540.41	
	03/13/17	48.20	48.35	0.15		3540.40	3,540.51	
	04/20/17	48.22	48.31	0.09		3540.44	3,540.51	
	05/19/17	48.24	48.30	0.06		3540.45	3,540.49	
	06/06/17	48.31	48.35	0.04		3540.40	3,540.43	
	09/20/17	48.31	48.36	0.05		3540.39	3,540.43	
	12/07/17	48.60	49.35	0.75		3539.40	3,539.95	
	01/24/18	48.54	49.04	0.50		3539.71	3,540.08	
	02/22/18	48.68	48.75	0.07		3540.00	3,540.05	
	03/14/18		48.68	0.00		3540.07	3,540.07	
	06/06/18		48.88	0.00		3539.87	3,539.87	
	09/24/18	49.08	49.18	0.10		3539.57	3,539.64	
	12/12/18	48.08	48.13	0.05		3540.62	3,540.66	
	03/12/19	49.29	49.35	0.06		3539.40	3,539.44	
	09/20/19		49.60	0.00		3539.15	3,539.15	
	12/04/19		49.75	0.00		3539.00	3,539.00	
	03/12/20		49.89	0.00		3538.86	3,538.86	
	06/16/20	49.90	49.92	0.02		3538.83	3,538.84	
	09/16/20		50.08	0.00		3538.67	3,538.67	
	12/02/20		50.24	0.00		3538.51	3,538.51	
	03/24/21		50.32	0.00		3538.43	3,538.43	
	06/08/21		50.46	0.00		3538.29	3,538.29	
	09/22/21		50.55	0.00		3538.20	3,538.20	
	12/01/21		50.81	0.00		3537.94	3,537.94	
	03/23/22		50.90	0.00		3537.85	3,537.85	
	06/01/22		51.05	0.00		3537.70	3,537.70	
	09/28/22		51.60	0.00		3537.15	3,537.15	
	12/07/22		52.26	0.00		3536.49	3,536.49	
HTRW-4	06/25/13		45.68	0.00	60.16	3542.89		
3588.57	12/11/13		46.13	0.00		3542.44		
	06/19/14		46.59	0.00		3541.98		
	12/11/14		46.85	0.00		3541.72		
	03/18/15		47.03	0.00		3541.54		
	06/11/15		47.11	0.00		3541.46		
	08/12/15		47.31	0.00		3541.26		
	09/17/15		47.35	0.00		3541.22		
	12/17/15		47.32	0.00		3541.25		
	06/07/16		47.70	0.00		3540.87		
	09/26/16		47.58	0.00		3540.99		
	10/28/16		47.55	0.00		3541.02		
	12/13/16		47.79	0.00		3540.78		
	01/23/17		47.95	0.00		3540.62		
	02/20/17		47.97	0.00		3540.60		
	03/13/17		47.98	0.00		3540.59		
	04/20/17		48.03	0.00		3540.54		
	06/06/17		48.09	0.00		3540.48		
	09/20/17		48.19	0.00		3540.38		
	12/07/17		48.30	0.00		3540.27		
	01/24/18		48.40	0.00		3540.17		
	02/22/18		48.43	0.00		3540.14		
	03/14/18		48.58	0.00		3539.99		
	06/06/18		48.64	0.00		3539.93		
	09/24/18		48.78	0.00		3539.79		
	12/12/18		48.48	0.00		3540.09		
	03/12/19		49.05	0.00		3539.52		
	09/20/19		49.38	0.00		3539.19		
	12/04/19		49.92	0.00		3538.65		
	03/12/20		49.55	0.00		3539.02		
	06/16/20		49.68	0.00		3538.89		
	09/16/20		49.82	0.00		3538.75		
	12/02/20		50.01	0.00		3538.56		
	03/24/21		50.11	0.00		3538.46		
	06/08/21		50.35	0.00		3538.22		
	09/22/21		50.38	0.00		3538.19		
	12/01/21		50.66	0.00		3537.91		
	03/23/22		50.65	0.00		3537.92		
	06/01/22		50.78	0.00		3537.79		
	09/28/22		51.03	0.00		3537.54		
	12/07/22		51.02	0.00		3537.55		

Notes:
DTP - depth to product
DTW - depth to water
TD - total depth
ft - feet
ft-bmp - feet-below measuring point
ft-msl - feet-mean sea level
gals - gallons
[1] groundwater elevation corrected for 0.73 specific gavity

Appendix B
Summary of Historical Groundwater Analytical Results

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
MW-2	08/23/04	26	4	5	14	49	NA	NA	0.00	43.45	3,547.40					
3590.85	01/11/05	72	<2	<2	15	87	NA	NA	0.00	43.02	3,547.83					
	03/08/06	<2	<2	<2	<6	<2	NA	NA	0.00	43.44	3,547.41					
	07/11/06	7.0	<2	<2	16	23	NA	NA	0.00	43.69	3,547.16					
	09/07/06	4.2	1.9	<0.5	3.2	9.3	NA	NA	0.00	43.64	3,547.21					
	12/19/06	2.1	1.0	0.9	4.3	8.3	NA	NA	0.00	43.83	3,547.02					
	03/13/07	<0.5	0.6	1.2	2.3	4.1	NA	NA	0.00	44.04	3,546.81					
	06/21/07	0.8	0.7	<0.5	3.8	5.3	NA	NA	0.00	44.11	3,546.74					
	09/21/07	1.4	1.1	<0.5	3.2	5.7	NA	NA	0.00	43.87	3,546.98					
	12/07/07	1.4	1.0	0.9	3.5	6.8	NA	NA	0.00	44.17	3,546.68					
	03/04/08	1.4	0.8	1.8	3.3	7.3	NA	NA	0.00	44.27	3,546.58					
	06/03/08	1.7	0.9	1.5	2.1	6.2	NA	NA	0.00	44.42	3,546.43					
	09/23/08	1.2	<0.5	0.6	3.8	5.6	NA	NA	0.00	44.69	3,546.16					
	12/18/08	1.0	0.8	<0.5	1.2	3.0	NA	NA	0.00	45.82	3,545.03					
	03/16/09	0.9	0.7	<0.5	2.9	4.5	NA	NA	0.00	44.98	3,545.87					
	06/23/09	1.2	<1.0	<1.0	<2.0	1.2	NA	NA	0.00	45.12	3,545.73					
	09/08/09	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.29	3,545.56					
	12/17/09	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.50	3,545.35					
	03/09/10	<1.0	<1.0	<1.0	<1.5	<1.0	NA	NA	0.00	45.70	3,545.15					
	06/16/10	<1.0	<1.0	<1.0	2.5	2.5	NA	NA	0.00	45.85	3,545.00					
	09/01/10	1.0	<1.0	<1.0	<2.0	1.0	NA	NA	0.00	45.82	3,545.03					
	12/06/10	1.6	<1.0	<1.0	<2.0	1.6	NA	NA	0.00	46.05	3,544.80					
	03/18/11	1.3	<1.0	14	2.9	18.2	NA	NA	0.00	46.18	3,544.67					
	06/23/11	1.1	<1.0	26	3.2	30.3	NA	NA	0.00	46.40	3,544.45					
	10/07/11	1.2	<1.0	14	<2.0	15.2	NA	NA	0.00	46.75	3,544.10					
	12/08/11	1.4	<1.0	5.7	3.6	10.7	NA	NA	0.00	46.91	3,543.94					
	08/07/12	<1.0	< 5.0	< 5.0	< 15	< 15	NA	NA	0.00	47.44	3,543.41	30.34	1.615	0.05	6.48	-125.9
	12/20/12	<1.0	<2.0	<1.0	<2.0	<1.0	NA	NA	0.00	47.90	3,542.95	17.51	1.094	0.74	6.85	-254.0
	06/25/13	<1.0	<2.0	<1.0	<2.0	<1.0	NA	NA	0.00	48.27	3,542.58	22.10	1.249	0.30	6.76	-60.6
	12/11/13	1.02	<2.0	<1.0	<2.0	<1.0	NA	NA	0.00	48.74	3,542.11	21.11	1.27	1.51	7.14	-117.0
	06/25/14	<1.0	<2.0	<1.0	1.43		NA	NA	0.00	49.19	3,541.66	19.94	1.078	1.19	6.89	-66.5
	12/11/14	<1.0	<2.0	<1.0	<1.0		<0.50	0.534	0.00	49.40	3,541.45	18.67	1.192	0.58	6.60	-102.3
	06/11/15	<1.0	<2.0	<1.0	<1.0		<0.10	0.337	0.00	49.75	3,541.10	35.49	1.265	2.20	6.75	-100.1
	12/16/15	<1.0	<2.0	<1.0	<1.0		0.141	0.678	0.00	49.91	3,540.94	18.56	1.274	0.75	6.94	-76.7
	06/09/16	<1.0	<2.0	<1.0	<1.0		<0.06	5.53	0.00	50.32	3,540.53	20.52	4.885	2.80	6.63	29.0
	12/14/16	<1.0	<2.0	<1.0	<1.0		0.097	5.53	0.00	50.34	3,540.51	18.90	2.171	2.37	7.61	-72.8
	06/06/17	<1.0	<2.0	<1.0	<2.0		0.105	4.98	0.00	50.67	3,540.18	22.15	1.549	1.85	6.85	-55.9
	09/19/17	<1.0	<2.0	<1.0	<2.0		0.093	2.74	0.00	50.67	3,540.18	22.80	1.627	0.96	6.71	-71.3
	12/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.795	0.00	50.91	3,539.94	19.01	2.887	1.21	7.01	-44.3
	03/14/18	<1.0	<2.0	<1.0	<2.0		0.101	1.91	0.00	51.00	3,539.85	21,11	1.403	0.98	6.87	-13.3
	06/05/18	<1.0	<2.0	<1.0	<2.0		0.140	1.89	0.00	51.22	3,539.63	22.85	1.787	1.07	6.93	-56.2
	09/24/18	<1.0	<2.0	<1.0	<2.0		<0.06	2.33	0.00	51.38	3,539.47	22.55	2.011	1.57	7.16	-33.6
	12/12/18	<1.0	<2.0	<1.0	<2.0		<0.06	2.56	0.00	51.50	3,539.35	19.83	2.334	1.33	7.22	-39.0
	03/12/19	<1.0	<2.0	<1.0	<2.0		0.091	NA	0.00	51.62	3,539.23	20.04	1.906	1.04	7.07	-60.8
	09/20/19	<1.0	<2.0	<1.0	<2.0		<0.06	NA	0.00	51.87	3,538.98	21.66	2.112	1.26	6.96	-26.3
	12/04/19	<1.0	<2.0	<1.0	<2.0		<0.06	NA	0.00	51.95	3,538.90	19.92	1.883	1.11	7.12	-45.6
	03/12/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	52.05	3,538.80	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	06/16/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	52.16	3,538.69	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	09/16/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	52.38	3,538.47	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	12/02/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	52.40	3,538.45	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	03/24/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	06/08/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	09/22/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	12/01/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	03/23/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	06/01/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	09/28/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	12/07/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
MW-3	08/23/04	<2	<2	<2	<6	<2	NA	NA	0.00	43.50	3,547.31					
3590.81	01/11/05	<2	<2	<2	<6	<2	NA	NA	0.00	42.93	3,547.88					
	03/08/06	<2	<2	<2	<6	<2	NA	NA	0.00	43.35	3,547.46					
	07/11/06	<2	<2	<2	<6	<2	NA	NA	0.00	43.63	3,547.18					
	09/07/06	<0.5	<0.5	<0.5	<1	<0.5	NA	NA	0.00	43.61	3,547.20					
	12/19/06	<0.5	<0.5	<0.5	<1	<0.5	NA	NA	0.00	43.76	3,547.05					
	03/13/07	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	43.97	3,546.84					
	06/21/07	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.03	3,546.78					
	09/21/07	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	43.83	3,546.98					
	12/07/07	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.11	3,546.70					
	03/04/08	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.32	3,546.49					
	06/03/08	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.35	3,546.46					
	09/23/08	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.65	3,546.16					
	12/18/08	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.77	3,546.04					
	03/16/09	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	0.00	44.92	3,545.89					
	06/23/09	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.08	3,545.73					
	09/08/09	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.24	3,545.57					
	12/17/09	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.44	3,545.37					
	03/09/10	<1.0	<1.0	<1.0	<1.5	<1.0	NA	NA	0.00	45.66	3,545.15					
	06/16/10	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.80	3,545.01					
	09/01/10	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.80	3,545.01					
	12/06/10	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.00	3,544.81					
	03/18/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.14	3,544.67					
	06/23/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.38	3,544.43					
	10/07/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.72	3,544.09					
	12/08/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.87	3,543.94					
	08/07/12	< 5.0	< 5.0	< 5.0	< 15	< 15	NA	NA	0.00	47.43	3,543.38	30.29	1.875	0.72	5.80	109.3
	12/20/12	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	47.87	3,542.94	17.39	1.108	1.28	6.87	-269.0
duplicate	12/20/12	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	47.87	3,542.94	17.39	1.108	1.28	6.87	-269.0
	06/25/13	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	48.28	3,542.53	20.80	1.453	1.98	6.60	204.9
	12/11/13	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	48.73	3,542.08	19.80	1.540	4.40	6.76	152.0
duplicate	12/11/13	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	48.73	3,542.08	19.80	1.540	4.40	6.76	152.0
	06/24/14	<1.0	<2.0	<1.0	1.61		NA	NA	0.00	49.20	3,541.61	22.28	1.242	2.94	6.78	0.2
	12/11/14	<1.0	<2.0	<1.0	<1.0		<0.10	0.135	0.00	49.41	3,541.40	17.74	1.196	2.51	6.66	69.0
	06/11/15	<1.0	<2.0	<1.0	<1.0		<0.10	<0.10	0.00	49.78	3,541.03	24.41	1.240	1.10	6.63	27.7
	12/16/15	<1.0	<2.0	<1.0	<1.0		<0.10	<0.102	0.00	49.96	3,540.85	16.75	1.229	2.22	6.86	126.0
	06/09/16	<1.0	<2.0	<1.0	<1.0		<0.06	<0.08	0.00	50.33	3,540.48	25.68	1.227	2.17	7.79	36.8
	12/14/16	<1.0	<2.0	<1.0	<1.0		<0.06	0.262	0.00	50.38	3,540.43	19.92	1.767	2.16	7.61	46.7
	06/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.358	0.00	50.68	3,540.13	23.66	1.109	3.80	6.93	64.5
	09/19/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.122	0.00	50.43	3,540.38	19.70	1.213	1.87	6.66	137.8
	12/06/17	<1.0	<2.0	<1.0	<2.0		0.073	0.668	0.00	50.91	3,539.90	17.60	1.102	1.62	6.79	76.5
	03/14/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.184	0.00	51.03	3,539.78	20.30	1.206	1.97	7.01	89.3
	06/05/18	<1.0	<2.0	<1.0	<2.0		0.100	0.221	0.00	51.24	3,539.57	24.89	1.369	2.69	6.92	111.2
	09/24/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.220	0.00	51.43	3,539.38	22.96	1.308	2.07	7.18	102.3
	12/12/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.224	0.00	51.55	3,539.26	20.13	1.198	1.85	6.88	91.2
	03/12/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.164	0.00	51.62	3,539.19	20.65	1.306	1.98	7.12	110.0
	09/20/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.225	0.00	51.88	3,538.93	21.87	1.398	2.11	7.44	88.6
	12/04/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.203	0.00	51.98	3,538.83	19.92	1.265	1.89	7.59	101.6
	03/12/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.190	0.00	52.10	3,538.71	20.86	1.065	2.02	7.02	78.7
	06/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.151	0.00	52.20	3,538.61	23.88	1.309	2.88	7.33	99.2
	09/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.222	0.00	52.39	3,538.42	22.64	1.562	1.76	7.24	120.6
	12/02/20	<1.0	<2.0	<1.0	<2.0		<0.06	NA	0.00	52.58	3,538.23	20.03	1.112	1.85	7.12	110.6
	03/24/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	06/08/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	09/22/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	12/01/21	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	03/23/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	06/01/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	09/28/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry
	12/07/22	NS-Dry	NS-Dry	NS-Dry	NS-Dry		NS-Dry	NS-Dry	0.00	dry	dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
MW-4	06/16/10	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	45.82	3,545.03					
3590.85	09/01/10	3.3	<1.0	<1.0	<2.0	3.3	NA	NA	0.00	45.81	3,545.04					
	12/06/10	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.01	3,544.84					
	03/18/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.16	3,544.69					
	06/23/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.40	3,544.45					
	10/07/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.74	3,544.11					
	12/08/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	46.88	3,543.97					
	08/07/12	< 5.0	< 5.0	< 5.0	< 15	< 15	NA	NA	0.00	47.44	3,543.41	28.73	1.457	0.12	6.45	1.3
	12/20/12	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	47.89	3,542.96	18.18	1.149	0.61	6.83	-238.0
	06/25/13	<1.0	<2.0	<1.0	<2.0	<1.0	NA	NA	0.00	48.27	3,542.58	21.30	1.306	0.14	6.70	129.8
	12/11/13	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	48.72	3,542.13	20.75	1.32	1.26	7.20	-2.0
	06/24/14	1.07	<2.0	<1.0	<1.0		NA	NA	0.00	49.18	3,541.67	22.22	1.168	1.07	6.75	-13.3
	12/11/14	<1.0	<2.0	<1.0	<1.0		<0.10	1.72	0.00	49.45	3,541.40	18.59	8.387	0.15	6.35	64.5
	06/11/15	<1.0	<2.0	<1.0	<1.0		<0.10	2.81	0.00	49.80	3,541.05	28.13	8.394	3.14	6.61	44.6
duplicate	06/11/15	<1.0	<2.0	<1.0	<1.0		<0.10	2.51	0.00	49.80	3,541.05	28.13	8.394	3.14	6.61	44.6
	12/16/15	<1.0	<2.0	<1.0	<1.0		<0.10	2.66	0.00	49.95	3,540.90	18.80	6.176	0.60	6.91	86.2
	06/09/16	<1.0	<2.0	<1.0	<1.0		<0.06	3.22	0.00	50.32	3,540.53	27.40	2.949	2.59	6.99	1.6
	12/14/16	<1.0	<2.0	<1.0	<1.0		<0.06	2.37	0.00	50.38	3,540.47	19.14	4.317	2.29	7.74	53.1
duplicate	12/14/16	<1.0	<2.0	<1.0	<1.0		<0.06	2.02	0.00	50.38	3,540.47	19.14	4.317	2.29	7.74	53.1
	06/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	1.50	0.00	50.68	3,540.17	22.60	1.68	0.42	6.98	71.9
	09/19/17	<1.0	<2.0	<1.0	<2.0		<0.06	1.73	0.00	50.68	3,540.17	21.70	2.014	1.94	6.91	23.5
	12/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	1.79	0.00	50.91	3,539.94	18.10	1.751	0.89	7.16	11.3
	03/14/18	3.31	<2.0	<1.0	<2.0		<0.06	0.357	0.00	51.02	3,539.83	20.60	2.342	1.23	6.77	55.4
	06/05/18	<1.0	<2.0	<1.0	<2.0		0.092	0.329	0.00	51.24	3,539.61	24.50	2.867	2.65	6.82	68.6
	09/24/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.200	0.00	51.41	3,539.44	23.65	2.436	1.86	7.04	75.6
	12/12/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.098	0.00	51.44	3,539.41	19.26	1.982	1.21	6.94	29.2
	03/12/19	<1.0	<2.0	<1.0	<2.0		0.061	0.101	0.00	51.59	3,539.26	20.88	2.467	1.77	7.06	56.0
	09/20/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.183	0.00	51.92	3,538.93	23.67	2,223	2.43	6.98	42.3
	12/04/19	<1.0	<2.0	<1.0	<2.0		<0.06	<0.150	0.00	51.95	3,538.90	20.11	2.116	1.63	7.11	32.0
	03/12/20	<1.0	<2.0	<1.0	<2.0		<0.06	<0.146	0.00	52.06	3,538.79	21.60	2.228	1.92	6.89	43.6
	06/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	<0.147	0.00	52.17	3,538.68	23.66	2.549	2.11	7.21	65.6
	09/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	<0.149	0.00	52.32	3,538.53	22.96	2.011	2.06	7.01	43.8
	12/02/20	<1.0	<2.0	<1.0	<2.0		<0.06	<0.151	0.00	52.49	3,538.36	21.04	2.198	1.88	6.92	65.4
	03/24/21	<1.0	<2.0	<1.0	<2.0		<0.06	<0.151	0.00	52.66	3,538.19	20.35	3.445	2.33	7.16	76.4
	06/08/21	NS	NS	NS	NS		NS	NS	0.00	52.81	3,538.04	NS	NS	NS	NS	NS
	09/22/21	NS	NS	NS	NS		NS	NS	0.00	52.94	3,537.91	NS	NS	NS	NS	NS
	12/01/21	<1.0	<2.0	<1.0	<2.0		<0.06	0.179	0.00	53.27	3,537.58	19.88	3.226	2.10	7.16	88.4
	03/23/22	NS	NS	NS	NS		NS	NS	0.00	53.28	3,537.57	NS	NS	NS	NS	NS
	06/01/22	<1.0	<2.0	<1.0	<2.0		<0.06	<0.162	0.00	53.30	3,537.55	20,97	2.559	1.92	7.07	90.8
	09/28/22	NS	NS	NS	NS		NS	NS	0.00	53.52	3,537.33	21.05	3.112	2.33	7.12	90.8
	12/07/22	<1.0	<2.0	<1.0	<2.0		<0.06	<0.157	0.00	53.63	3,537.22	NM	NM	NM	NM	NM

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
MW-5	03/18/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	47.61	3,545.14					
3592.75	06/23/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	47.83	3,544.92					
	10/07/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	48.17	3,544.58					
	12/08/11	<1.0	<1.0	<1.0	<2.0	<1.0	NA	NA	0.00	48.31	3,544.44					
	08/07/12	< 5.0	< 5.0	< 5.0	<15	< 15	NA	NA	0.00	48.83	3,543.92	27.30	0.775	4.84	6.01	115.9
	12/20/12	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	49.26	3,543.49	17.49	0.633	4.70	7.04	-187.0
	06/25/13	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	49.64	3,543.11	22.20	0.848	4.60	6.63	181.1
	12/11/13	<1.0	<2.0	<1.0	<2.0	<2.0	NA	NA	0.00	50.09	3,542.66	19.35	0.801	4.79	7.37	86.0
	06/25/14	<1.0	<2.0	<1.0	1.13		NA	NA	0.00	50.53	3,542.22	20.39	0.782	3.54	6.91	39.2
	12/11/14	<1.0	<2.0	<1.0	<1.0		<0.10	<0.102	0.00	50.76	3,541.99	18.61	0.888	6.35	6.11	103.6
	06/11/15	<1.0	<2.0	<1.0	<1.0		<0.10	<0.10	0.00	51.12	3,541.63	29.58	0.882	6.63	6.72	40.4
	12/16/15	<1.0	<2.0	<1.0	<1.0		<0.10	0.115	0.00	51.33	3,541.42	17.09	0.910	5.79	7.16	129.1
	06/09/16	<1.0	<2.0	<1.0	<1.0		<0.06	<0.08	0.00	51.68	3,541.07	26.69	1.099	6.03	6.55	59.9
	12/14/16	<1.0	<2.0	<1.0	<1.0		<0.06	0.194	0.00	51.76	3,540.99	19.03	1.361	5.93	7.72	79.5
	06/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.162	0.00	52.08	3,540.67	19.10	0.905	5.75	6.78	127.2
	09/19/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.132	0.00	52.07	3,540.68	20.70	1.001	4.04	6.81	59.8
	12/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.425	0.00	52.30	3,540.45	17.90	0.768	3.92	7.08	33.2
duplicate	12/06/17	<1.0	<2.0	<1.0	<2.0		<0.06	0.467	0.00	52.30	3,540.45	17.90	0.768	3.92	7.08	33.2
	03/14/18	<1.0	<2.0	<1.0	<2.0		<0.06	<0.0756	0.00	52.38	3,540.37	20.10	0.901	4.11	6.76	65.4
	06/05/18	<1.0	<2.0	<1.0	<2.0		0.081	0.155	0.00	52.58	3,540.17	25.60	1.162	4.76	6.96	123.0
duplicate	06/05/18	<1.0	<2.0	<1.0	<2.0		0.097	0.137	0.00	52.58	3,540.17	25.60	1.162	4.76	6.96	123.0
	09/24/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.111	0.00	52.50	3,540.25	24.66	0.913	3.88	7.24	102.2
duplicate	09/24/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.136	0.00	52.50	3,540.25	24.66	0.913	3.88	7.24	102.2
	12/12/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.157	0.00	52.54	3,540.21	18.87	1.012	4.23	7.11	55.6
duplicate	12/12/18	<1.0	<2.0	<1.0	<2.0		<0.06	0.148	0.00	52.54	3,540.21	18.87	1.012	4.23	7.11	55.6
	03/12/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.178	0.00	52.97	3,539.78	20.18	1.123	3.65	7.02	88.0
duplicate	03/12/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.157	0.00	52.97	3,539.78	20.18	1.123	3.65	7.02	88.0
	09/20/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.223	0.00	53.22	3,539.53	23.98	0.889	4.11	7.16	112.0
duplicate	09/20/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.230	0.00	53.22	3,539.53	23.98	0.889	4.11	7.16	112.0
	12/04/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.171	0.00	53.34	3,539.41	20.18	0.987	3.97	7.02	99.6
duplicate	12/04/19	<1.0	<2.0	<1.0	<2.0		<0.06	0.168	0.00	53.34	3,539.41	20.18	0.987	3.97	7.02	99.6
	03/12/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.235	0.00	53.40	3,539.35	21.20	1.115	4.01	7.11	102.0
duplicate	03/12/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.190	0.00	53.40	3,539.35	21.20	1.115	4.01	7.11	102.0
	06/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	<0.148	0.00	53.58	3,539.17	23.40	1.233	4.26	6.92	123.0
duplicate	06/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.166	0.00	53.58	3,539.17	23.40	1.233	4.26	6.92	123.0
	09/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.156	0.00	53.69	3,539.06	21.96	1.002	3.84	7.27	89.6
duplicate	09/16/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.173	0.00	53.69	3,539.06	21.96	1.002	3.84	7.27	89.6
	12/02/20	<1.0	<2.0	<1.0	<2.0		<0.06	0.178	0.00	53.91	3,538.84	20.86	1.246	2.96	7.08	112.0
	03/24/21	<1.0	<2.0	<1.0	<2.0		<0.06	0.281	0.00	54.05	3,538.70	21.22	1.388	3.03	7.03	98.7
duplicate	03/24/21	<1.0	<2.0	<1.0	<2.0		<0.06	0.162	0.00	54.05	3,538.70	21.22	1.388	3.03	7.03	98.7
	06/08/21	NS	NS	NS	NS		NS	NS	0.00	54.25	3,538.50	NS	NS	NS	NS	NS
	09/22/21	NS	NS	NS	NS		NS	NS	0.00	54.29	3,538.46	NS	NS	NS	NS	NS
	12/01/21	<1.0	<2.0	<1.0	<2.0		<0.06	<0.147	0.00	54.51	3,538.24	20.86	0.998	3.24	7.18	119.0
duplicate	12/01/21	<1.0	<2.0	<1.0	<2.0		<0.06	<0.147	0.00	54.51	3,538.24	20.86	0.998	3.24	7.18	119.0
	03/23/22	NS	NS	NS	NS		NS	NS	0.00	54.60	3,538.15	NS	NS	NS	NS	NS
	06/01/22	<1.0	<2.0	<1.0	<2.0		<0.06	<0.159	0.00	54.67	3,538.08	21.44	1.234	2.94	7.23	102.0
	09/28/22	NS	NS	NS	NS		NS	NS	0.00	56.88	3,535.87	22.03	1.488	3.12	7.07	122.1
	12/07/22	<1.0	<2.0	<1.0	<2.0		<0.06	<0.147	0.00	54.98	3,537.77	NM	NM	NM	NM	NM
duplicate	12/07/22	<1.0	<2.0	<1.0	<2.0		<0.06	<0.148	0.00	54.98	3,537.77	NM	NM	NM	NM	NM

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
HTRW-1	06/25/13	NSP	NSP	NSP	NSP	NSP	NA	NA	0.00	45.28	3,542.87					
3588.14	12/11/13	NSP	NSP	NSP	NSP	NSP	NA	NA	0.01	45.79	3,542.36					
	6/24/14	910	48.7	89.1	70.0		NA	NA	0.01	46.19	3,541.95	21.90	1.533	1.37	6.77	-108.5
duplicate	6/24/14	922	49.0	88.8	69.2		NA	NA	0.00	46.19	3,541.95	21.90	1.533	1.37	6.77	-108.5
	12/11/14	NSP	NSP	NSP	NSP		NSP	NSP	0.05	45.51	3,542.67	NSP	NSP	NSP	NSP	NSP
	06/11/15	NSP	NSP	NSP	NSP		NSP	NSP	0.80	47.61	3,541.11	NSP	NSP	NSP	NSP	NSP
	12/16/15	NSP	NSP	NSP	NSP		NSP	NSP	0.02	46.95	3,541.20	NSP	NSP	NSP	NSP	NSP
	06/09/16	NSP	NSP	NSP	NSP		NSP	NSP	0.00	46.34	3,541.80	NM	NM	NM	NM	NM
	12/14/16	1.97	<0.6	<0.3	0.943		<0.06	0.432	0.00	47.44	3,540.70	19.34	1.72	2.34	7.58	60.8
	06/06/17	774	21.9	1.90	57.6		1.85	0.549	0.00	47.71	3,540.43	21.12	1.014	1.71	6.91	71.7
duplicate	06/06/17	694	13.8	1.37	47.2		1.43	1.49	0.00	47.71	3,540.43	21.12	1.014	1.71	6.91	71.7
	09/19/17	1620	76.1	17.1	82.6		2.88	1.23	0.00	47.72	3,540.42	21.7	0.693	1.7	6.93	-45.4
	12/06/17	NS	NS	NS	NS	NS	NS	NS	0.00	NM	NM	NS	NS	NS	NS	NS
	03/14/18	102	<2.0	<1.0	8.16		0.360	<0.0754	0.00	48.03	3,540.10	20.6	0.892	1.92	7.23	-11.5
	06/05/18	163	40.0	2.03	34.2		1.40	2.17	0.00	48.22	3,540.06	22.1	0.989	1.87	6.89	22.3
	09/24/18	11.4	2.78	<3.0	0.564		0.109	0.406	0.00	48.45	3,540.11	21.6	1.106	1.98	6.92	11.6
	12/12/18	377	20.5	1.07	20.7		1.15	0.240	0.00	48.99	3,539.15	19.03	0.979	2.12	7.01	22.9
	03/12/19	28.8	2.6	<3.0	3.48		0.139	0.154	0.00	48.70	3,539.44	20.8	0.979	2.04	7.18	10.6
	09/20/19	42.4	3.07	0.413	3.84		0.318	0.263	0.00	48.97	3,539.17	21.6	0.889	1.96	6.98	-22
	12/04/19	57.5	5.82	0.559	8.27		0.118	<0.148	0.00	48.97	3,539.17	19.2	1.021	1.88	7.01	9.66
	03/12/20	2.28	<2.0	<1.0	<2.0		<0.06	0.222	0.00	49.09	3,539.05	20.6	0.926	1.92	7.26	60.5
	06/16/20	70.6	11.0	0.960	4.46		0.116	0.288	0.00	49.20	3,538.94	23.4	1.115	2.01	7.33	44.6
	09/16/20	135	7.3	0.382	9.86		0.308	<0.149	0.00	49.38	3,538.76	22.7	1.226	1.94	7.45	10.8
	12/02/20	626	53.3	2.23	66.0		1.79	0.256	0.00	49.56	3,538.58	21.2	1.101	1.87	7.33	35.6
	03/24/21	849	124	3.53	56.8		2.36	0.204	0.00	49.72	3,538.42	20.8	0.966	2.11	7.26	54.8
	06/08/21	765	86.3	2.20	46.1		1.70	<0.147	0.00	49.90	3,538.24	22.3	1.074	2.02	7.11	44.7
	09/22/21	1.20	<2.0	<1.0	<2.0		<0.06	<0.551	0.00	50.00	3,538.14	23.1	1.226	1.92	7.2	60.6
	12/01/21	2.49	10.4	<1.0	<2.0		<0.06	<0.152	0.00	50.22	3,537.92	22.8	1.119	2.33	7.19	55.8
	03/23/22	585	18.3	12.0	21.9		1.28	<0.153	0.00	50.28	3,537.86	20.4	1.228	1.09	7.06	10.2
	06/01/22	1.53	1.38	<1.0	<2.0		<0.06	<0.151	0.00	50.34	3,537.80	21.6	1.387	1.12	7.21	22.3
	09/28/22	0.429	<2.0	<1.0	<2.0		<0.06	0.321	0.00	50.56	3,537.58	22.9	1,.438	2.13	7.18	54.3
	12/07/22	<1.0	<2.0	<1.0	<2.0		<0.06	<0.149	0.00	50.68	3,537.46	NM	NM	NM	NM	NM
HTRW-2	6/25/13	62.3	21.4	4.4	13.0	101.1	NA	NA	0.00	44.60	3,542.91	21.70	1.233	2.80	6.81	180.2
3587.51	12/11/13	530	35.9	12.4	33.4	611.7	NA	NA	0.00	45.05	3,542.46	20.08	1.43	1.07	7.34	-2.00
	6/24/14	748	47.6	59.2	84.0		NA	NA	0.00	45.52	3,541.99	19.88	1.536	0.68	6.86	-128.9
	12/11/14	722	135	36.4	129		2.0	0.253	0.00	45.79	3,541.72	17.13	1.444	0.41	6.67	-89.1
	06/11/15	875	28.7	35.3	29.3		1.24	0.354	0.00	46.05	3,541.46	21.95	1.937	2.82	6.06	-43.3
	12/16/15	503	<20.0	18.9	<10.0		1.01	0.144	0.00	46.25	3,541.26	17.01	1.523	0.69	7.07	-69.4
	06/09/16	863	6.35	60.6	6.87		2.03	1.05	0.00	46.66	3,540.85	NM	NM	NM	NM	NM
	12/14/16	322	7.32	33.3	5.66		0.128	0.461	0.00	46.74	3,540.77	18.65	1.732	1.39	7.73	10.1
	06/06/17	342	4.05	2.81	17.9		0.901	0.332	0.00	47.03	3,540.48	18.81	1.035	4.62	6.75	107.4
	09/19/17	NS	NS	NS	NS	NS	NS	NS	0.00	47.08	3,540.43	NS	NS	NS	NS	NS
	12/06/17	NS	NS	NS	NS	NS	NS	NS	0.00	47.25	3,540.26	NS	NS	NS	NS	NS
	03/14/18	NS	NS	NS	NS	NS	NS	NS	0.00	48.42	3,539.09	NS	NS	NS	NS	NS
	06/05/18	NS	NS	NS	NS	NS	NS	NS	0.00	47.56	3,539.95	NS	NS	NS	NS	NS
	09/24/18	NS	NS	NS	NS	NS	NS	NS	0.00	47.77	3,539.74	NS	NS	NS	NS	NS
	12/12/18	NS	NS	NS	NS	NS	NS	NS	0.00	47.79	3,539.72	NS	NS	NS	NS	NS
	03/12/19	NS	NS	NS	NS	NS	NS	NS	0.00	48.01	3,539.50	NS	NS	NS	NS	NS
	09/20/19	NS	NS	NS	NS	NS	NS	NS	0.00	48.28	3,539.23	NS	NS	NS	NS	NS
	12/04/19	NS	NS	NS	NS	NS	NS	NS	0.00	48.35	3,539.16	NS	NS	NS	NS	NS
	03/12/20	NS	NS	NS	NS	NS	NS	NS	0.00	48.47	3,539.04	NS	NS	NS	NS	NS
	06/16/20	NS	NS	NS	NS	NS	NS	NS	0.00	48.59	3,538.92	NS	NS	NS	NS	NS
	09/16/20	NS	NS	NS	NS	NS	NS	NS	0.00	48.68	3,538.83	NS	NS	NS	NS	NS
	12/02/20	NS	NS	NS	NS	NS	NS	NS	0.00	48.89	3,538.62	NS	NS	NS	NS	NS
	03/24/21	NS	NS	NS	NS	NS	NS	NS	0.00	49.10	3,538.41	NS	NS	NS	NS	NS
	06/08/21	NS	NS	NS	NS	NS	NS	NS	0.00	49.23	3,538.28	NS	NS	NS	NS	NS
	09/22/21	NS	NS	NS	NS	NS	NS	NS	0.00	49.34	3,538.17	NS	NS	NS	NS	NS
	12/01/21	NS	NS	NS	NS	NS	NS	NS	0.00	49.56	3,537.95	NS	NS	NS	NS	NS
	03/23/22	NS	NS	NS	NS	NS	NS	NS	0.00	49.69	3,537.82	NS	NS	NS	NS	NS
	06/01/22	NS	NS	NS	NS	NS	NS	NS	0.00	49.76	3,537.75	NS	NS	NS	NS	NS
	09/28/22	NS	NS	NS	NS	NS	NS	NS	0.00	49.99	3,537.52	NS	NS	NS	NS	NS
	12/07/22	NS	NS	NS	NS	NS	NS	NS	0.00	49.98	3,537.53	NS	NS	NS	NS	NS

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

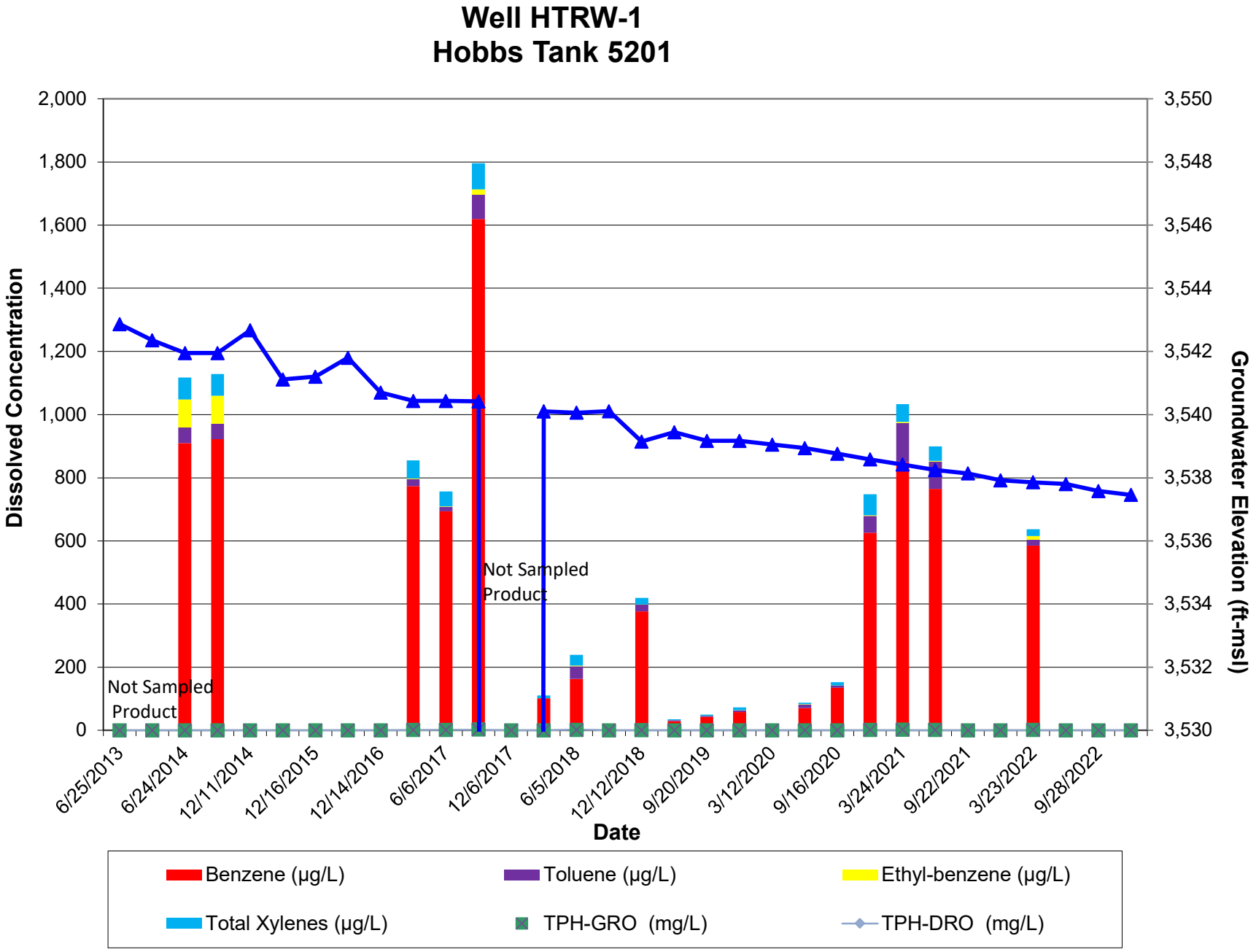
Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
HTRW-3	6/25/13	NSP	NSP	NSP	NSP	NSP	NA	NA	0.01	45.88	3,542.88					
3588.75	12/11/13	NSP	NSP	NSP	NSP	NSP	NA	NA	0.00	46.33	3,542.43					
	6/24/14	3090	1220	450	520		NA	NA	0.00	46.79	3,541.96	21.17	1.56	0.75	6.70	-160.1
	12/11/14	3760	1750	466	632		12.2	1.31	0.00	47.03	3,541.72	17.26	1.684	0.33	6.59	-209.1
	06/11/15	NSP	NSP	NSP	NSP		NSP	NSP	0.26	47.61	3,541.33	NSP	NSP	NSP	NSP	NSP
	12/16/15	NSP	NSP	NSP	NSP		NSP	NSP	1.70	49.00	3,540.99	NSP	NSP	NSP	NSP	NSP
	06/09/16	NSP	NSP	NSP	NSP		NSP	NSP	0.03	47.84	3,540.93	NSP	NSP	NSP	NSP	NSP
	12/14/16	NSP	NSP	NSP	NSP		NSP	NSP	0.51	48.48	3,540.64	NSP	NSP	NSP	NSP	NSP
	06/06/17	NSP	NSP	NSP	NSP		NSP	NSP	0.04	48.35	3,540.43	NSP	NSP	NSP	NSP	NSP
	09/19/17	NSP	NSP	NSP	NSP		NSP	NSP	0.05	48.36	3,540.43	NSP	NSP	NSP	NSP	NSP
	12/06/17	NSP	NSP	NSP	NSP		NSP	NSP	0.75	49.35	3,539.95	NSP	NSP	NSP	NSP	NSP
	03/14/18	NSP	NSP	NSP	NSP		NSP	NSP	0.00	48.68	3,540.07	NSP	NSP	NSP	NSP	NSP
	06/05/18	NSP	NSP	NSP	NSP		NSP	NSP	0.00	48.88	3,539.87	NSP	NSP	NSP	NSP	NSP
	09/24/18	NSP	NSP	NSP	NSP		NSP	NSP	0.10	49.18	3,539.64	NSP	NSP	NSP	NSP	NSP
	12/12/18	NSP	NSP	NSP	NSP		NSP	NSP	0.05	48.13	3,540.66	NSP	NSP	NSP	NSP	NSP
	03/12/19	NSP	NSP	NSP	NSP		NSP	NSP	0.06	49.35	3,539.44	NSP	NSP	NSP	NSP	NSP
	09/20/19	NSP	NSP	NSP	NSP		NSP	NSP	0.00	49.60	3,539.15	NSP	NSP	NSP	NSP	NSP
	12/04/19	NSP	NSP	NSP	NSP		NSP	NSP	0.00	49.75	3,539.00	NSP	NSP	NSP	NSP	NSP
	03/12/20	NS	NS	NS	NS		NS	NS	0.00	49.89	3,538.86	NS	NS	NS	NS	NS
	06/16/20	NSP	NSP	NSP	NSP		NSP	NSP	0.02	49.92	3,538.84	NSP	NSP	NSP	NSP	NSP
	09/16/20	NS	NS	NS	NS		NS	NS	0.00	50.08	3,538.67	NS	NS	NS	NS	NS
	12/02/20	NS	NS	NS	NS		NS	NS	0.00	50.24	3,538.51	NS	NS	NS	NS	NS
	03/24/21	NS	NS	NS	NS		NS	NS	0.00	50.32	3,538.43	NS	NS	NS	NS	NS
	06/08/21	NS	NS	NS	NS		NS	NS	0.00	50.46	3,538.29	NS	NS	NS	NS	NS
	09/22/21	NS	NS	NS	NS		NS	NS	0.00	50.55	3,538.20	NS	NS	NS	NS	NS
	12/01/21	NS	NS	NS	NS		NS	NS	0.00	50.81	3,537.94	NS	NS	NS	NS	NS
	03/23/22	NS	NS	NS	NS		NS	NS	0.00	50.90	3,537.85	NS	NS	NS	NS	NS
	06/01/22	NS	NS	NS	NS		NS	NS	0.00	51.05	3,537.70	NS	NS	NS	NS	NS
	09/28/22	NS	NS	NS	NS		NS	NS	0.00	51.60	3,537.15	NS	NS	NS	NS	NS
	12/07/22	NS	NS	NS	NS		NS	NS	0.00	52.26	3,536.49	NS	NS	NS	NS	NS

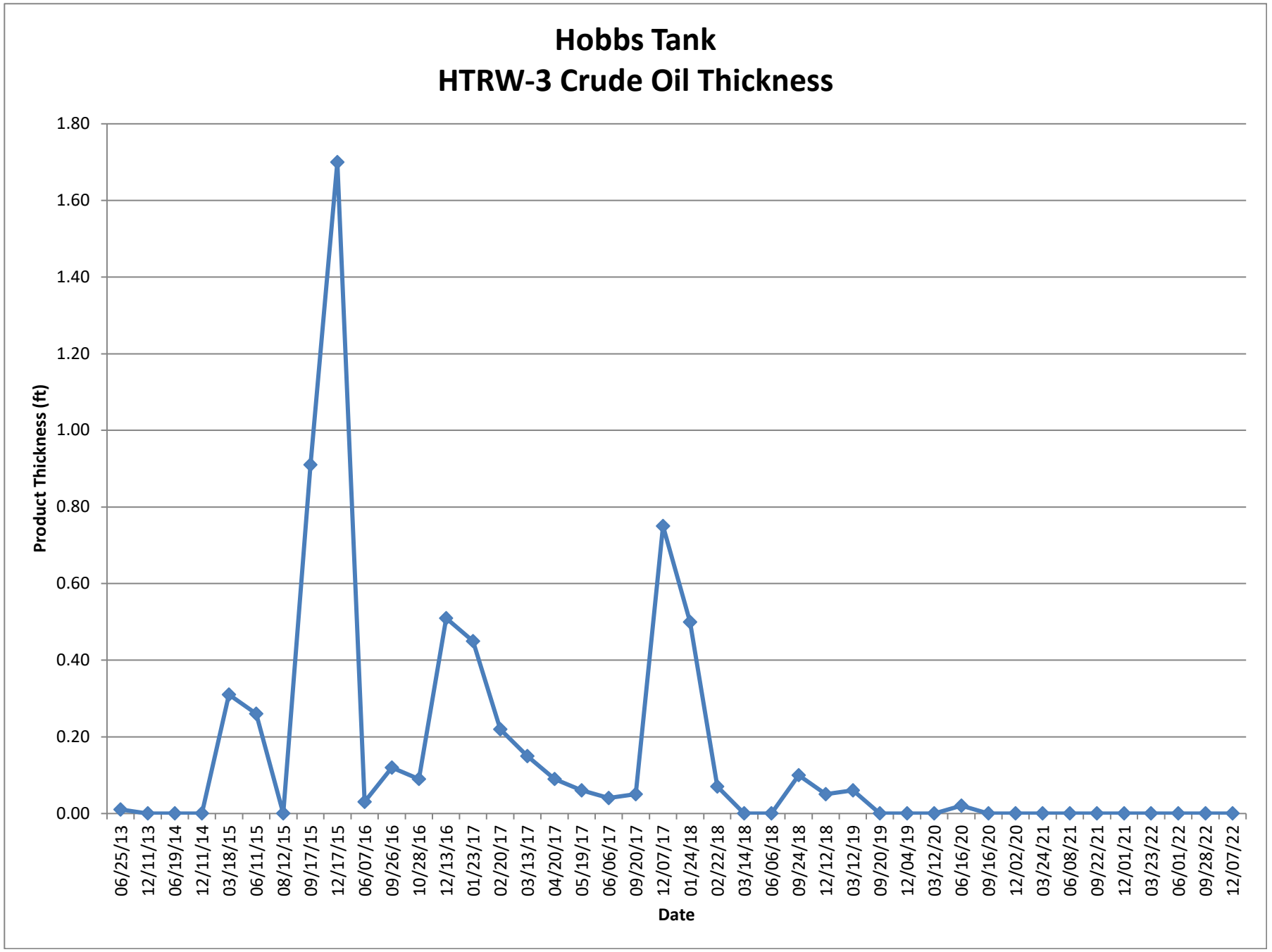
Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HF Sinclair- Hobbs Tank 5201 - Lea County, New Mexico

Monitor Well ID/ MP Elevation	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Product Thickness (feet)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)	Temperature (deg-C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
NMWQCC Groundwater Standard		5	1000	700	620	--	NE	NE								
HTRW-4	6/25/13	**87.4**	49.4	32.5	52.8	222.1	NA	NA	0.00	45.68	3,542.89	22.30	0.96	2.04	6.87	190.9
3588.57	12/11/13	**951**	157	88.1	219	1414.7	NA	NA	0.00	46.13	3,542.44	20.41	1.44	0.95	7.5	-144
	6/24/14	**1720**	698	253	436		NA	NA	0.00	46.59	3,541.98	21.9	1.751	1.16	7.01	-96.1
	12/11/14	**1590**	288	126	277		4.03	0.643	0.00	46.85	3,541.72	16.54	1.581	0.15	6.81	-190.5
	06/11/15	**1490**	29.2	111	29.9		2.16	0.365	0.00	47.11	3,541.46	23.87	1.486	0.68	6.92	-183.2
	12/16/15	NS	NS	NS	NS	NS	NS	NS	0.00	47.32	3,541.25	NS	NS	NS	NS	NS
	06/09/16	**834**	11.7	35.9	17.8		1.60	1.10	0.00	47.70	3,540.87	22.27	1.559	1.93	6.78	-117
	12/14/16	**3800**	29.6	16.2	46.1		1.31	0.951	0.00	47.79	3,540.78	19.01	1.937	1.48	7.96	-74.01
	06/06/17	**564**	6.20	3.62	57.8		1.97	0.736	0.00	48.09	3,540.48	18.92	1.092	1.77	6.97	-50.9
	09/19/17	NS	NS	NS	NS	NS	NS	NS	0.00	48.19	3,540.38	NS	NS	NS	NS	NS
	12/06/17	NS	NS	NS	NS	NS	NS	NS	0.00	48.30	3,540.27	NS	NS	NS	NS	NS
	03/14/18	NS	NS	NS	NS	NS	NS	NS	0.00	48.58	3,539.99	NS	NS	NS	NS	NS
	06/05/18	NS	NS	NS	NS	NS	NS	NS	0.00	48.64	3,539.93	NS	NS	NS	NS	NS
	09/24/18	NS	NS	NS	NS	NS	NS	NS	0.00	48.78	3,539.79	NS	NS	NS	NS	NS
	12/12/18	NS	NS	NS	NS	NS	NS	NS	0.00	48.48	3,540.09	NS	NS	NS	NS	NS
	03/12/19	NS	NS	NS	NS	NS	NS	NS	0.00	49.05	3,539.52	NS	NS	NS	NS	NS
	09/20/19	NS	NS	NS	NS	NS	NS	NS	0.00	49.38	3,539.19	NS	NS	NS	NS	NS
	12/04/19	NS	NS	NS	NS	NS	NS	NS	0.00	49.92	3,538.65	NS	NS	NS	NS	NS
	03/12/20	NS	NS	NS	NS	NS	NS	NS	0.00	49.55	3,539.02	NS	NS	NS	NS	NS
	06/16/20	NS	NS	NS	NS	NS	NS	NS	0.00	49.68	3,538.89	NS	NS	NS	NS	NS
	09/16/20	NS	NS	NS	NS	NS	NS	NS	0.00	49.82	3,538.75	NS	NS	NS	NS	NS
	12/02/20	NS	NS	NS	NS	NS	NS	NS	0.00	50.01	3,538.56	NS	NS	NS	NS	NS
	03/24/21	NS	NS	NS	NS	NS	NS	NS	0.00	50.11	3,538.46	NS	NS	NS	NS	NS
	06/08/21	NS	NS	NS	NS	NS	NS	NS	0.00	50.35	3,538.22	NS	NS	NS	NS	NS
	09/22/21	NS	NS	NS	NS	NS	NS	NS	0.00	50.38	3,538.19	NS	NS	NS	NS	NS
	12/01/21	NS	NS	NS	NS	NS	NS	NS	0.00	50.66	3,537.91	NS	NS	NS	NS	NS
	03/23/22	NS	NS	NS	NS	NS	NS	NS	0.00	50.65	3,537.92	NS	NS	NS	NS	NS
	06/01/22	NS	NS	NS	NS	NS	NS	NS	0.00	50.78	3,537.79	NS	NS	NS	NS	NS
	09/28/22	NS	NS	NS	NS	NS	NS	NS	0.00	51.03	3,537.54	NS	NS	NS	NS	NS
	12/07/22	NS	NS	NS	NS	NS	NS	NS	0.00	51.02	3,537.55	NS	NS	NS	NS	NS

Notes:
BOLD = Exceeds New Mexico Water Quality Commission (NMWQC) Standard
µg/L = microgram per liter
mg/L= micrograms per liter
< = Not detected above laboratory reporting limit
ft-bmp - feet-below measuring point
ft-msl - feet-mean sea level
deg-C - degrees-Celcius
mS/cm - milliSiemens per centimeter
mV - millivolts
NSP - Not Sampled Product
MP - Measuring Point
NS - Not Sampled
NA- Not analyzed
NE - Not Established
BTEX = Benzene, Toluene, Ethylbenzene and Xylenes
TPH-GRO = Total Petroleum Hydrocarbons-Gasoline Range Oganics
TPH-DRO = Total Petroleum Hydrocarbons-Diesel Range Oganics
BTEX analyzed by Method 8260C
TPH-GRO analyzed by Method 8015V
TPH-DRO analyzed by Method 8015D

Appendix C
Graphs





Appendix D
Groundwater Laboratory Reports

April 01, 2022

Brad Stephenson
GHD
14998 W 6th Ave #800
Golden, CO 80401
TEL: (720) 974-0935
FAX (432) 686-0186

Order No.: 2203276

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 1 sample(s) on 3/24/2022 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-21-27

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. Round Rock, TX 78664
Phone 512.388.8222
Web: www.dhlanalytical.com
Email: login@dhlanalytical.com

CHAIN-OF-CUSTODY

PAGE 1 OF 1

CLIENT: GTO
ADDRESS: ARVADA, CO
PHONE: 3039416156 EMAIL: BRAD.STEPHENSON@GTO.COM
DATA REPORTED TO: BRAD
ADDITIONAL REPORT COPIES TO: JEFF

DATE: 3/23/22
PO#:
PROJECT LOCATION OR NAME: HOBBS TANK
CLIENT PROJECT # 1224355
COLLECTOR: B STEPHENSON

LABORATORY USE ONLY
DHL WORKORDER #: 2203276

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

Lab Use Only

W=WATER L=LIQUID S=SOIL SO=SOLID SE=SEDIMENT P=PAINT SL=SLUDGE

Field Sample I.D.	DHL Lab #	Collection Date	Collection Time	Matrix	Container Type	# of Containers	PRESERVATION: HCL	HNO_3	H_2SO_4	NaOH ☐ Zn Acetate ☐	ICE ☐ UNPRESERVED ☐	ANALYSES: BTEX ☒ MTBE ☐ [METHOD 8260]	TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐	GRO 8015 ☒ DRO 8015 ☒	VOC 8260 ☐ VOC 624.1 ☐	SVOC 8270 ☐ SVOC 625.1 ☐	PAH 8270 ☐ HOLD PAH ☐	PEST 8270 ☐ 625.1 ☐ O-P PEST 8270 ☐	PCB 8082 ☐ 608.3 ☐ PCB 8270 ☐ 625.1 ☐	HERB 8321 ☐ T PHOS ☐ AMMONIA ☐	METALS 6020 ☐ 200.8 ☐ DISS. METALS ☐	RCRA 8 ☐ TX11 ☐ ____	pH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐	ANIONS 300 ☐ 9056 ☐ ____	TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐	TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐	RCI ☐ IGN ☐ DGAS ☐ OIL&GREASE ☐	TDS ☐ TSS ☐ % MOIST ☐ CYANIDE ☐	FIELD NOTES
HTRW-1	01	3/23/22	10:00	W	GI	8						X		X															

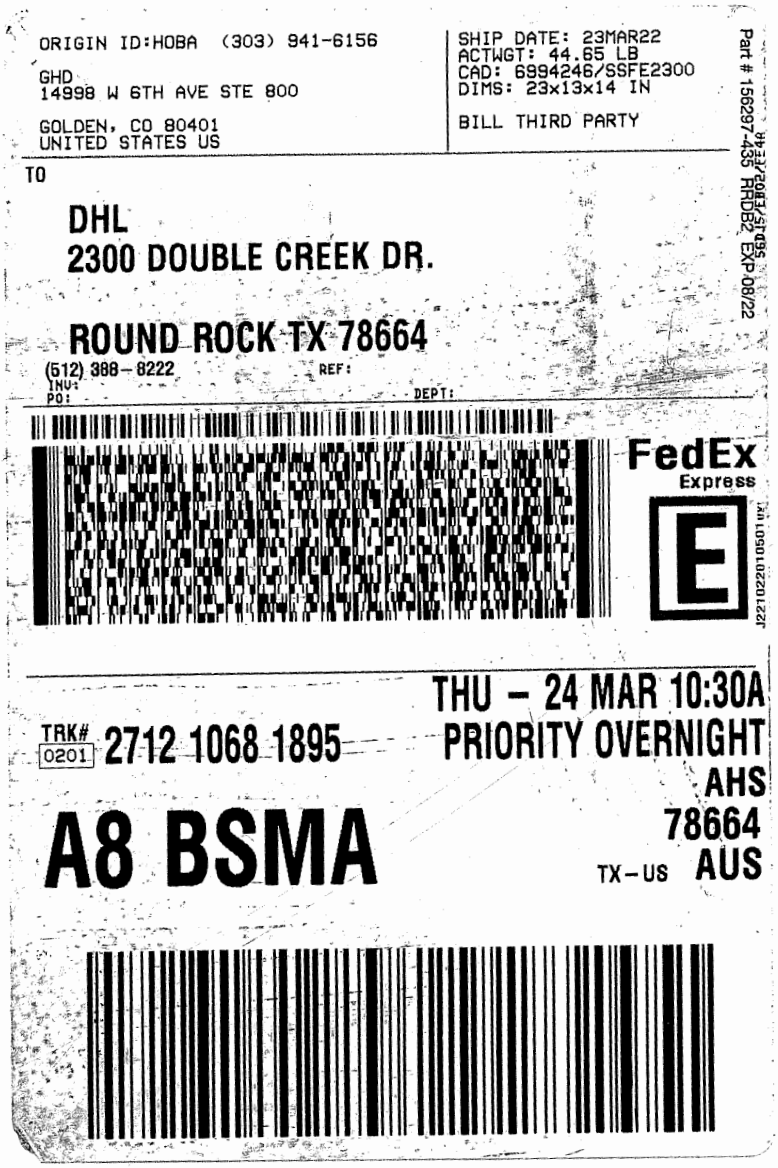
Relinquished By: (Sign) — DATE/TIME 3/23/22 1600 — Received by: To FedEx
Relinquished By: (Sign) Fedex — DATE/TIME 3/24/22 0704 — Received by:
Relinquished By: (Sign) — DATE/TIME — Received by:

TURN AROUND TIME (CALL FIRST FOR RUSH)
RUSH-1 DAY☐ RUSH-2 DAY☐ RUSH-3 DAY☐
NORMAL ☐ OTHER ☐
DUE DATE _____ ☐

LABORATORY USE ONLY
RECEIVING TEMP (°C): 5.5°C THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☒ NOT USED
CARRIER: ☐ LSO ☒ FEDEX ☐ UPS ☐ COURIER ☐ OTHER ☐ HAND DELIVERED

☐ DHL DISPOSAL @ 5.00 each ☐ Return

DHL COC REV 3 | MAR 2021



ORIGIN ID:HOBA (303) 941-6156

GHD
14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 23MAR22
ACTWGT: 44.65 LB
CAD: 6994246/SSFE2300
DIMS: 23x13x14 IN

BILL THIRD PARTY

Part # 156297-433 RRD02 EXP 08/22

TO

DHL
2300 DOUBLE CREEK DR.

ROUND ROCK TX 78664
(512) 388-8222 REF:
INV:
PO: DEPT:

FedEx
Express

THU - 24 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 2712 1068 1895

AHS
78664
TX-US AUS

A8 BSMA

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 3/24/2022

Work Order Number 2203276 Received by: KAO

Checklist completed by: _____ 3/24/2022 Reviewed by (pl) 3/24/2022
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☐	No ☑	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	5.5 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted: GHD Date contacted: 3/24/22 Person contacted Brad S.

Contacted by: John D. Regarding: Documentation

Comments: COC not signed & sample not recorded.

Corrective Action: Added sample to COC & emailed Brad for signed copy of COC.

Page 1 of 1

DHL Analytical, Inc. **Date:** *01-Apr-22*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2203276

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition and Standard Methods.

For Volatiles analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

For DRO analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For DRO analysis by method M8015D the surrogate recoveries for the sample and all QC samples were below control limits for Isopropylbenzene. These are flagged accordingly. The remaining surrogate was within control limits. No further corrective actions were taken.

DHL Analytical, Inc.

Date: *01-Apr-22*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2203276-01
Project No:	11224355	**Collection Date:**	03/23/22 10:00 AM
Lab Order:	2203276	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.153	0.153	0.191		mg/L	1	03/30/22 04:45 PM
Surr: Isopropylbenzene	28.7	0	47-142	S	%REC	1	03/30/22 04:45 PM
Surr: Octacosane	69.1	0	51-124		%REC	1	03/30/22 04:45 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	1.28	0.0600	0.100		mg/L	1	03/30/22 03:49 PM
Surr: Tetrachlorethene	94.6	0	74-138		%REC	1	03/30/22 03:49 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	0.585	0.00300	0.0100		mg/L	10	03/29/22 05:10 PM
Ethylbenzene	0.0120	0.000300	0.00100		mg/L	1	03/29/22 09:59 PM
m,p-Xylene	0.0148	0.000600	0.00200		mg/L	1	03/29/22 09:59 PM
o-Xylene	0.00705	0.000300	0.00100		mg/L	1	03/29/22 09:59 PM
Toluene	0.0183	0.000600	0.00200		mg/L	1	03/29/22 09:59 PM
Total Xylenes	0.0219	0.000300	0.00100		mg/L	1	03/29/22 09:59 PM
Surr: 1,2-Dichloroethane-d4	101	0	72-119		%REC	10	03/29/22 05:10 PM
Surr: 1,2-Dichloroethane-d4	101	0	72-119		%REC	1	03/29/22 09:59 PM
Surr: 4-Bromofluorobenzene	92.2	0	76-119		%REC	1	03/29/22 09:59 PM
Surr: 4-Bromofluorobenzene	93.2	0	76-119		%REC	10	03/29/22 05:10 PM
Surr: Dibromofluoromethane	95.9	0	85-115		%REC	1	03/29/22 09:59 PM
Surr: Dibromofluoromethane	94.8	0	85-115		%REC	10	03/29/22 05:10 PM
Surr: Toluene-d8	102	0	81-120		%REC	1	03/29/22 09:59 PM
Surr: Toluene-d8	99.5	0	81-120		%REC	10	03/29/22 05:10 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc. **Date:** *01-Apr-22*

CLIENT: GHD
Work Order: 2203276
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_220330A

The QC data in batch 104566 applies to the following samples: 2203276-01C

Sample ID: **MB-104566** Batch ID: **104566** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_220330A** Analysis Date: **3/30/2022 3:23:38 PM** Prep Date: **3/28/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0315		0.1000		31.5	47	142			S
Surr: Octacosane	0.0730		0.1000		73.0	51	124			

Sample ID: **LCS-104566** Batch ID: **104566** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_220330A** Analysis Date: **3/30/2022 3:32:42 PM** Prep Date: **3/28/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.738	0.100	1.250	0	59.0	50	114			
Surr: Isopropylbenzene	0.0276		0.1000		27.6	47	142			S
Surr: Octacosane	0.0742		0.1000		74.2	51	124			

Sample ID: **LCSD-104566** Batch ID: **104566** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_220330A** Analysis Date: **3/30/2022 3:41:45 PM** Prep Date: **3/28/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.760	0.100	1.250	0	60.8	50	114	2.98	30	
Surr: Isopropylbenzene	0.0236		0.1000		23.6	47	142	0	0	S
Surr: Octacosane	0.0736		0.1000		73.6	51	124	0	0	

Qualifiers:				
	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2203276
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_220330A

The QC data in batch 104601 applies to the following samples: 2203276-01B

Sample ID: LCS-104601	Batch ID: 104601	TestNo: M8015V	Units: mg/L
SampType: LCS	Run ID: GC4_220330A	Analysis Date: 3/30/2022 10:32:51 AM	Prep Date: 3/30/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.51	0.100	2.500	0	100	67	136			
Surr: Tetrachlorethene	0.351		0.4000		87.7	74	138			

Sample ID: LCSD-104601	Batch ID: 104601	TestNo: M8015V	Units: mg/L
SampType: LCSD	Run ID: GC4_220330A	Analysis Date: 3/30/2022 10:55:05 AM	Prep Date: 3/30/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.58	0.100	2.500	0	103	67	136	2.68	30	
Surr: Tetrachlorethene	0.383		0.4000		95.7	74	138	0	0	

Sample ID: MB-104601	Batch ID: 104601	TestNo: M8015V	Units: mg/L
SampType: MBLK	Run ID: GC4_220330A	Analysis Date: 3/30/2022 12:01:41 PM	Prep Date: 3/30/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.390		0.4000		97.6	74	138			

Sample ID: 2203266-01BMS	Batch ID: 104601	TestNo: M8015V	Units: mg/L
SampType: MS	Run ID: GC4_220330A	Analysis Date: 3/30/2022 4:12:36 PM	Prep Date: 3/30/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.35	0.100	2.500	0	94.2	67	136			
Surr: Tetrachlorethene	0.338		0.4000		84.6	74	138			

Sample ID: 2203266-01BMSD	Batch ID: 104601	TestNo: M8015V	Units: mg/L
SampType: MSD	Run ID: GC4_220330A	Analysis Date: 3/30/2022 4:35:04 PM	Prep Date: 3/30/2022

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.53	0.100	2.500	0	101	67	136	7.40	30	
Surr: Tetrachlorethene	0.366		0.4000		91.4	74	138	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2203276
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_220329A

The QC data in batch 104569 applies to the following samples: 2203276-01A

Sample ID: **LCS-104569** Batch ID: **104569** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS5_220329A** Analysis Date: **3/29/2022 1:28:00 PM** Prep Date: **3/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0246	0.00100	0.0232	0	106	81	122			
Ethylbenzene	0.0239	0.00100	0.0232	0	103	80	120			
m,p-Xylene	0.0480	0.00200	0.0464	0	103	80	120			
o-Xylene	0.0244	0.00100	0.0232	0	105	80	120			
Toluene	0.0233	0.00200	0.0232	0	100	80	120			
Total Xylenes	0.0724	0.00100	0.0696	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	201		200.0		100	72	119			
Surr: 4-Bromofluorobenzene	187		200.0		93.6	76	119			
Surr: Dibromofluoromethane	192		200.0		95.9	85	115			
Surr: Toluene-d8	200		200.0		99.9	81	120			

Sample ID: **LCSD-104569** Batch ID: **104569** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCSD** Run ID: **GCMS5_220329A** Analysis Date: **3/29/2022 1:54:00 PM** Prep Date: **3/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0237	0.00100	0.0232	0	102	81	122	3.69	20	
Ethylbenzene	0.0230	0.00100	0.0232	0	99.4	80	120	3.75	20	
m,p-Xylene	0.0470	0.00200	0.0464	0	101	80	120	2.19	20	
o-Xylene	0.0236	0.00100	0.0232	0	102	80	120	3.23	20	
Toluene	0.0225	0.00200	0.0232	0	96.8	80	120	3.68	20	
Total Xylenes	0.0706	0.00100	0.0696	0	101	80	120	2.54	20	
Surr: 1,2-Dichloroethane-d4	196		200.0		98.2	72	119	0	0	
Surr: 4-Bromofluorobenzene	186		200.0		93.0	76	119	0	0	
Surr: Dibromofluoromethane	194		200.0		97.2	85	115	0	0	
Surr: Toluene-d8	201		200.0		101	81	120	0	0	

Sample ID: **MB-104569** Batch ID: **104569** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS5_220329A** Analysis Date: **3/29/2022 3:25:00 PM** Prep Date: **3/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100								
Ethylbenzene	<0.000300	0.00100								
m,p-Xylene	<0.000600	0.00200								
o-Xylene	<0.000300	0.00100								
Toluene	<0.000600	0.00200								
Total Xylenes	<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4	196		200.0		98.0	72	119			
Surr: 4-Bromofluorobenzene	188		200.0		93.8	76	119			
Surr: Dibromofluoromethane	191		200.0		95.7	85	115			
Surr: Toluene-d8	203		200.0		101	81	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

June 08, 2022

Brad Stephenson
GHD
14998 W 6th Ave #800
Golden, CO 80401
TEL: (720) 974-0935
FAX (432) 686-0186

Order No.: 2206016

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 4 sample(s) on 6/2/2022 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-22-28

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. Round Rock, TX 78664
Phone 512.388.8222
Web: **www.dhlanalytical.com**
Email: **login@dhlanalytical.com**

CHAIN-OF-CUSTODY

CLIENT: GMD
ADDRESS: ARVADA, CO
PHONE 3039416156 EMAIL: BRAD.STEPHENSON@GMD.COM
DATA REPORTED TO: BSTEPHENSON@GMD.COM
ADDITIONAL REPORT COPIES TO: SCLOUD

DATE: 6/1/22
PO#:
PROJECT LOCATION OR NAME: HOBBS TANK
CLIENT PROJECT # 11224355 COLLECTOR: BSTEPHENSON

LABORATORY USE ONLY
DHL WORKORDER #: 2206016

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

W=WATER L=LIQUID S=SOIL SO=SOLID SE=SEDIMENT P=PAINT SL=SLUDGE

Field Sample I.D.	Lab Use Only DHL Lab #	Collection Date	Collection Time	Matrix	Container Type	# of Containers	PRESERVATION HCL	HNO_3	H_2SO_4	NaOH ☐ Zn Acetate ☐	ICE ☐ UNPRESERVED ☐	ANALYSES BTEX ☒ MTBE ☐ [METHOD 8260]	TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐	GRO 8015 ☒ DRO 8015 ☒	VOC 8260 ☐ VOC 624.1 ☐	SVOC 8270 ☐ SVOC 625.1 ☐	PAH 8270 ☐ HOLD PAH ☐	PEST 8270 ☐ 625.1 ☐ O-P PEST 8270 ☐	PCB 8082 ☐ 608.3 ☐ PCB 8270 ☐ 625.1 ☐	HERB 8321 ☐ T PHOS ☐ AMMONIA ☐	METALS 6020 ☐ 200.8 ☐ DISS. METALS ☐	RCRA 8 ☐ TX11 ☐ _____	pH☐ HEX CHROM☐ ALKALINITY☐ COD☐	ANIONS 300 ☐ 9056 ☐ _____	TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐	TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐	RCI ☐ IGN ☐ DGAS ☐ OIL&GREASE ☐	TDS ☐ TSS ☐ % MOIST ☐ CYANIDE ☐	FIELD NOTES
MW-4	01	6/1/22	0915			8						X		X																
MW-5	02	6/1/22	~~0945~~ 0930			8						X		X																
HTRW-1	03	6/1/22	0945			8						X		X																
TRIP	04											X		X GRO																

Relinquished By: (Sign) DATE/TIME 6/1/22 1500 Received by: to FEDEX
Relinquished By: (Sign) Fedex DATE/TIME 6/2/22 0910 Received by:
Relinquished By: (Sign) DATE/TIME Received by:

TURN AROUND TIME (CALL FIRST FOR RUSH)
RUSH-1 DAY☐ RUSH-2 DAY☐ RUSH-3 DAY☐
NORMAL ☐ OTHER ☐
DUE DATE _____ ☐

LABORATORY USE ONLY
RECEIVING TEMP (°C): 3.7°C THERM #: 18
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☑ NOT USED
CARRIER: ☐ LSO ☑ FEDEX ☐ UPS ☐ COURIER ☐ OTHER ☐ HAND DELIVERED

☐ **DHL DISPOSAL @ 5.00 each** ☐ **Return**

DHL COC REV 3 | MAR 2021

ORIGIN ID:HOBA (303) 941-6156

GHD
14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 01JUN22
ACTWGT: 24.75 LB
CAD: 6994246/SSFE2321
DIMS: 24x13x14 IN

BILL THIRD PARTY

Part # 156297-495 RRD EXP 02/23

TO

DHL ANALYTICAL
2300 DOUBLE CREEK DR.

ROUND ROCK TX 78664

(512) 388-8222

REF:

INV:

PO:

DEPT:

FedEx
Express

J222022041201uv

1 of 2

TRK# 0201 2738 1004 6473

MASTER

A8 BSMA

THU - 02 JUN 10:30A
PRIORITY OVERNIGHT

AHS
78664
TX-US AUS

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 6/2/2022

Work Order Number 2206016 Received by: KAO

Checklist completed by: _____ 6/2/2022 Reviewed by _____ 6/2/2022
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	3.7 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: One of two vials for sample TRIP received broken.

Corrective Action: Proceed with analysis using unbroken vial.

Page 1 of 1

DHL Analytical, Inc. **Date:** *08-Jun-22*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2206016

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition and Standard Methods.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

DHL Analytical, Inc.

Date: *08-Jun-22*

CLIENT:	GHD	**Client Sample ID:**	MW-4
Project:	Hobbs Tank	**Lab ID:**	2206016-01
Project No:	11224355	**Collection Date:**	06/01/22 09:15 AM
Lab Order:	2206016	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.162	0.162	0.203		mg/L	1	06/03/22 11:38 AM
Surr: Isopropylbenzene	59.5	0	25-124		%REC	1	06/03/22 11:38 AM
Surr: Octacosane	84.3	0	51-124		%REC	1	06/03/22 11:38 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/03/22 02:47 PM
Surr: Tetrachlorethene	95.6	0	74-138		%REC	1	06/03/22 02:47 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 12:55 AM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 12:55 AM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/04/22 12:55 AM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 12:55 AM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/04/22 12:55 AM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 12:55 AM
Surr: 1,2-Dichloroethane-d4	98.5	0	72-119		%REC	1	06/04/22 12:55 AM
Surr: 4-Bromofluorobenzene	98.5	0	76-119		%REC	1	06/04/22 12:55 AM
Surr: Dibromofluoromethane	103	0	85-115		%REC	1	06/04/22 12:55 AM
Surr: Toluene-d8	99.9	0	81-120		%REC	1	06/04/22 12:55 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *08-Jun-22*

CLIENT:	GHD	**Client Sample ID:**	MW-5
Project:	Hobbs Tank	**Lab ID:**	2206016-02
Project No:	11224355	**Collection Date:**	06/01/22 09:30 AM
Lab Order:	2206016	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.159	0.159	0.199		mg/L	1	06/03/22 11:47 AM
Surr: Isopropylbenzene	57.3	0	25-124		%REC	1	06/03/22 11:47 AM
Surr: Octacosane	83.1	0	51-124		%REC	1	06/03/22 11:47 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/03/22 03:09 PM
Surr: Tetrachlorethene	99.1	0	74-138		%REC	1	06/03/22 03:09 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:20 AM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:20 AM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/04/22 01:20 AM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:20 AM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/04/22 01:20 AM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:20 AM
Surr: 1,2-Dichloroethane-d4	96.6	0	72-119		%REC	1	06/04/22 01:20 AM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	06/04/22 01:20 AM
Surr: Dibromofluoromethane	103	0	85-115		%REC	1	06/04/22 01:20 AM
Surr: Toluene-d8	101	0	81-120		%REC	1	06/04/22 01:20 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *08-Jun-22*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2206016-03
Project No:	11224355	**Collection Date:**	06/01/22 09:45 AM
Lab Order:	2206016	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.151	0.151	0.189		mg/L	1	06/03/22 11:56 AM
Surr: Isopropylbenzene	51.1	0	25-124		%REC	1	06/03/22 11:56 AM
Surr: Octacosane	81.2	0	51-124		%REC	1	06/03/22 11:56 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/03/22 03:31 PM
Surr: Tetrachlorethene	101	0	74-138		%REC	1	06/03/22 03:31 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	0.00153	0.000300	0.00100		mg/L	1	06/04/22 01:44 AM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:44 AM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/04/22 01:44 AM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:44 AM
Toluene	0.00138	0.000600	0.00200	J	mg/L	1	06/04/22 01:44 AM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	06/04/22 01:44 AM
Surr: 1,2-Dichloroethane-d4	97.5	0	72-119		%REC	1	06/04/22 01:44 AM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	06/04/22 01:44 AM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	06/04/22 01:44 AM
Surr: Toluene-d8	101	0	81-120		%REC	1	06/04/22 01:44 AM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *08-Jun-22*

CLIENT:	GHD	**Client Sample ID:**	TRIP
Project:	Hobbs Tank	**Lab ID:**	2206016-04
Project No:	11224355	**Collection Date:**	06/01/22
Lab Order:	2206016	**Matrix:**	TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/03/22 06:25 PM
Surr: Tetrachlorethene	82.7	0	74-138		%REC	1	06/03/22 06:25 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/03/22 01:32 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/03/22 01:32 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/03/22 01:32 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/03/22 01:32 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/03/22 01:32 PM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	06/03/22 01:32 PM
Surr: 1,2-Dichloroethane-d4	97.8	0	72-119		%REC	1	06/03/22 01:32 PM
Surr: 4-Bromofluorobenzene	104	0	76-119		%REC	1	06/03/22 01:32 PM
Surr: Dibromofluoromethane	103	0	85-115		%REC	1	06/03/22 01:32 PM
Surr: Toluene-d8	102	0	81-120		%REC	1	06/03/22 01:32 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc. **Date:** *08-Jun-22*

CLIENT: GHD
Work Order: 2206016
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_220603A

The QC data in batch 105650 applies to the following samples: 2206016-01C, 2206016-02C, 2206016-03C

Sample ID: **MB-105650** Batch ID: **105650** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_220603A** Analysis Date: **6/3/2022 10:05:36 AM** Prep Date: **6/2/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0419		0.1000		41.9	25	124			
Surr: Octacosane	0.0834		0.1000		83.4	51	124			

Sample ID: **LCS-105650** Batch ID: **105650** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_220603A** Analysis Date: **6/3/2022 10:14:39 AM** Prep Date: **6/2/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.960	0.100	1.250	0	76.8	50	114			
Surr: Isopropylbenzene	0.0512		0.1000		51.2	25	124			
Surr: Octacosane	0.0863		0.1000		86.3	51	124			

Sample ID: **LCSD-105650** Batch ID: **105650** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_220603A** Analysis Date: **6/3/2022 10:23:43 AM** Prep Date: **6/2/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.942	0.100	1.250	0	75.4	50	114	1.89	30	
Surr: Isopropylbenzene	0.0358		0.1000		35.8	25	124	0	0	
Surr: Octacosane	0.0862		0.1000		86.2	51	124	0	0	

Qualifiers:				
	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2206016
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_220603A

The QC data in batch 105663 applies to the following samples: 2206016-01B, 2206016-02B, 2206016-03B, 2206016-04A

Sample ID: **LCS-105663**	Batch ID: **105663**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCS**	Run ID: **GC4_220603A**	Analysis Date: **6/3/2022 10:09:29 AM**	Prep Date: **6/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.78	0.100	2.500	0	111	67	136			
Surr: Tetrachlorethene	0.406		0.4000		102	74	138			

Sample ID: **LCSD-105663**	Batch ID: **105663**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCSD**	Run ID: **GC4_220603A**	Analysis Date: **6/3/2022 10:31:38 AM**	Prep Date: **6/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.79	0.100	2.500	0	112	67	136	0.159	30	
Surr: Tetrachlorethene	0.412		0.4000		103	74	138	0	0	

Sample ID: **MB-105663**	Batch ID: **105663**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MBLK**	Run ID: **GC4_220603A**	Analysis Date: **6/3/2022 11:38:20 AM**	Prep Date: **6/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.385		0.4000		96.2	74	138			

Sample ID: **2206015-01BMS**	Batch ID: **105663**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MS**	Run ID: **GC4_220603A**	Analysis Date: **6/3/2022 6:47:25 PM**	Prep Date: **6/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	1.99	0.100	2.500	0	79.5	67	136			
Surr: Tetrachlorethene	0.315		0.4000		78.7	74	138			

Sample ID: **2206015-01BMSD**	Batch ID: **105663**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MSD**	Run ID: **GC4_220603A**	Analysis Date: **6/3/2022 7:09:56 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.22	0.100	2.500	0	88.8	67	136	11.1	30	
Surr: Tetrachlorethene	0.334		0.4000		83.6	74	138	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2206016
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_220603A

The QC data in batch 105660 applies to the following samples: 2206016-01A, 2206016-02A, 2206016-03A, 2206016-04A

Sample ID: **LCS-105660** Batch ID: **105660** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS7_220603A** Analysis Date: **6/3/2022 10:40:00 AM** Prep Date: **6/2/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0273	0.00100	0.0232	0	118	81	122			
Ethylbenzene	0.0275	0.00100	0.0232	0	119	80	120			
m,p-Xylene	0.0553	0.00200	0.0464	0	119	80	120			
o-Xylene	0.0274	0.00100	0.0232	0	118	80	120			
Toluene	0.0273	0.00200	0.0232	0	118	80	120			
Total Xylenes	0.0828	0.00100	0.0696	0	119	80	120			
Surr: 1,2-Dichloroethane-d4	194		200.0		97.0	72	119			
Surr: 4-Bromofluorobenzene	197		200.0		98.6	76	119			
Surr: Dibromofluoromethane	202		200.0		101	85	115			
Surr: Toluene-d8	200		200.0		100	81	120			

Sample ID: **MB-105660** Batch ID: **105660** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS7_220603A** Analysis Date: **6/3/2022 12:19:00 PM** Prep Date: **6/2/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100								
Ethylbenzene	<0.000300	0.00100								
m,p-Xylene	<0.000600	0.00200								
o-Xylene	<0.000300	0.00100								
Toluene	<0.000600	0.00200								
Total Xylenes	<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4	191		200.0		95.7	72	119			
Surr: 4-Bromofluorobenzene	206		200.0		103	76	119			
Surr: Dibromofluoromethane	204		200.0		102	85	115			
Surr: Toluene-d8	205		200.0		102	81	120			

Sample ID: **SB-220603** Batch ID: **105660** TestNo: **SW8260D** Units: **mg/L**
SampType: **SBLK** Run ID: **GCMS7_220603A** Analysis Date: **6/3/2022 6:25:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100	0							
Ethylbenzene	<0.000300	0.00100	0							
m,p-Xylene	<0.000600	0.00200	0							
o-Xylene	<0.000300	0.00100	0							
Toluene	<0.000600	0.00200	0							
Total Xylenes	<0.000300	0.00100	0							
Surr: 1,2-Dichloroethane-d4	193		0							
Surr: 4-Bromofluorobenzene	203		0							
Surr: Dibromofluoromethane	207		0							
Surr: Toluene-d8	201		0							

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

October 05, 2022

Brad Stephenson
GHD
14998 W 6th Ave #800
Golden, CO 80401
TEL: (720) 974-0935
FAX (432) 686-0186

Order No.: 2209249

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 2 sample(s) on 9/29/2022 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-22-28

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. Round Rock, TX 78664
Phone 512.388.8222
Web: **www.dhlanalytical.com**
Email: **login@dhlanalytical.com**

CHAIN-OF-CUSTODY

PAGE 1 OF 1

CLIENT: GHD
ADDRESS: ~~GOR~~ LAKEWOOD, CO
PHONE: 3039416156 EMAIL: BRAD.STEPHENSON@GHD.COM
DATA REPORTED TO: BSTEPHENSON, JCLOUD @GHD.COM
ADDITIONAL REPORT COPIES TO:

PO#:
PROJECT LOCATION OR NAME: HOBBS PARK
CLIENT PROJECT #: 12435S

LABORATORY USE ONLY
DHL WORKORDER #: 2209249

COLLECTOR: E SULLIVAN

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

Lab Use Only: W=WATER L=LIQUID S=SOIL SO=SOLID SE=SEDIMENT P=PAINT SL=SLUDGE

Field Sample I.D.	DHL Lab #	Collection Date	Collection Time	Matrix	Container Type	# of Containers	PRESERVATION: HCL	HNO_3	H_2SO_4	NaOH ☐ Zn Acetate ☐	ICE ☐ UNPRESERVED ☐	ANALYSES: BTEX ☒ MTBE ☐ [METHOD 8260]	TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐	GRO 8015 ☒ DRO 8015 ☒	VOC 8260 ☐ VOC 624.1 ☐	SVOC 8270 ☐ SVOC 625.1 ☐	PAH 8270 ☐ HOLD PAH ☐	PEST 8270 ☐ 625.1 ☐ O-P PEST 8270 ☐	PCB 8082 ☐ 608.3 ☐ PCB 8270 ☐ 625.1 ☐	HERB 8321 ☐ T PHOS ☐ AMMONIA ☐	METALS 6020 ☐ 200.8 ☐ DISS. METALS ☐	RCRA 8 ☐ TX11 ☐ _____	pH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐	ANIONS 300 ☐ 9056 ☐ _____	TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐	TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐	RCI ☐ IGN ☐ DGAS ☐ OIL&GREASE ☐	TDS ☐ TSS ☐ % MOIST ☐ CYANIDE ☐	FIELD NOTES
HTRW-1	01	9/28/22	0800	W		3						X		X															
TRIP	02	"	"	W		2						X		X															

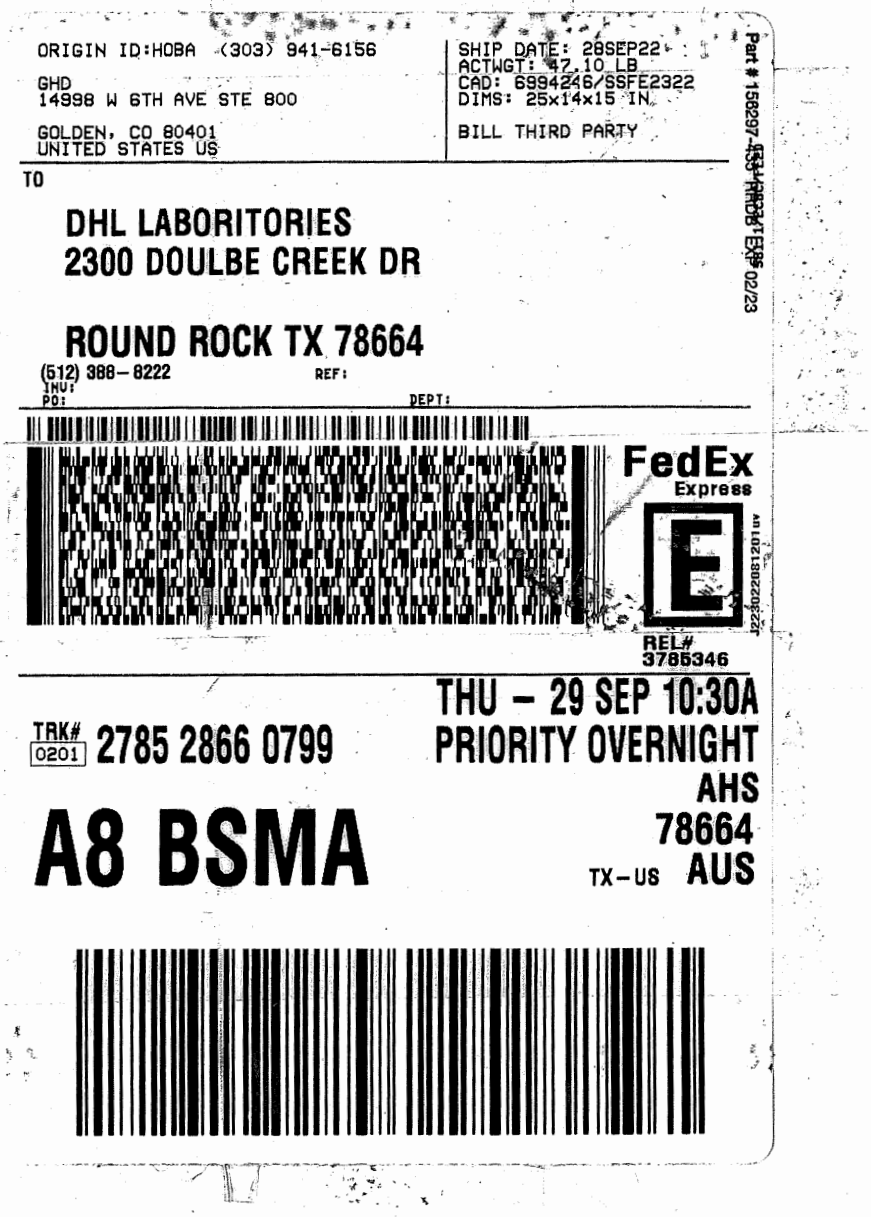
Relinquished By: (Sign) — DATE/TIME: 9/28/22 1600 — Received by: TO FEDEX
Relinquished By: (Sign) Fedex — DATE/TIME: 9/29/22 0853 — Received by: Kaa O'Ulu
Relinquished By: (Sign) — DATE/TIME — Received by:

TURN AROUND TIME (CALL FIRST FOR RUSH)
RUSH-1 DAY☐ RUSH-2 DAY☐ RUSH-3 DAY☐
NORMAL ☐ OTHER ☐
DUE DATE _____ ☐

LABORATORY USE ONLY
RECEIVING TEMP (°C): 0.9°C THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☑ NOT USED
CARRIER: ☐ LSO ☑ FEDEX ☐ UPS ☐ COURIER ☐ OTHER ☐ HAND DELIVERED

☐ **DHL DISPOSAL @ 5.00 each** ☐ **Return**

DHL COC REV 3 | MAR 2021



ORIGIN ID:HOBA (303) 941-6156
GHD
14998 W 6TH AVE STE 800
GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 28SEP22
ACTWGT: 47.10 LB
CAD: 6994246/SSFE2322
DIMS: 25x14x15 IN
BILL THIRD PARTY

TO
DHL LABORITORIES
2300 DOULBE CREEK DR
ROUND ROCK TX 78664
(512) 388-8222 REF:
INV:
PO: DEPT:

FedEx Express

REL# 3785346

TRK# 0201 2785 2866 0799

THU - 29 SEP 10:30A
PRIORITY OVERNIGHT

A8 BSMA

AHS
78664
TX-US AUS

Part # 158297-453-HRDB EXP 02/23

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 9/29/2022

Work Order Number 2209249 Received by: KAO

Checklist completed by: Signature 9/29/2022 Date Reviewed by Initials 9/29/2022 Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes	No	Not Present ✓
Chain of custody present?	Yes ✓	No	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ✓	No	
Sample containers intact?	Yes ✓	No	
Sufficient sample volume for indicated test?	Yes ☑	No	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	0.9 °C
Water - VOA vials have zero headspace?	Yes ✓	No	No VOA vials submitted ☐ NA ☐
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ✓ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

Any No response must be detailed in the comments section below.

Client contacted: Date contacted: Person contacted

Contacted by: Regarding:

Comments:

Corrective Action:

Page 1 of 1

DHL Analytical, Inc. **Date:** *05-Oct-22*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2209249

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition, M8015D and M8015V.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For DRO analysis by method M8015D the surrogate recovery for sample HTRW-1 was slightly above control limits Octacosane. This is flagged accordingly. The remaining surrogate was within control limits. No further corrective actions were taken.

DHL Analytical, Inc.

Date: *05-Oct-22*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2209249-01
Project No:	224355	**Collection Date:**	09/28/22 08:00 AM
Lab Order:	2209249	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.321	0.148	0.185		mg/L	1	09/30/22 01:06 PM
Surr: Isopropylbenzene	54.9	0	25-124		%REC	1	09/30/22 01:06 PM
Surr: Octacosane	134	0	51-124	S	%REC	1	09/30/22 01:06 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	10/03/22 03:49 PM
Surr: Tetrachlorethene	76.3	0	74-138		%REC	1	10/03/22 03:49 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	0.000429	0.000300	0.00100	J	mg/L	1	09/29/22 06:47 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/29/22 06:47 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/29/22 06:47 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/29/22 06:47 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/29/22 06:47 PM
Surr: 1,2-Dichloroethane-d4	94.4	0	72-119		%REC	1	09/29/22 06:47 PM
Surr: 4-Bromofluorobenzene	97.4	0	76-119		%REC	1	09/29/22 06:47 PM
Surr: Dibromofluoromethane	97.6	0	85-115		%REC	1	09/29/22 06:47 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	09/29/22 06:47 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *05-Oct-22*

CLIENT:	GHD	**Client Sample ID:**	Trip
Project:	Hobbs Tank	**Lab ID:**	2209249-02
Project No:	224355	**Collection Date:**	09/28/22 08:00 AM
Lab Order:	2209249	**Matrix:**	TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	10/03/22 01:06 PM
Surr: Tetrachlorethene	92.6	0	74-138		%REC	1	10/03/22 01:06 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	09/29/22 12:44 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/29/22 12:44 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/29/22 12:44 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/29/22 12:44 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/29/22 12:44 PM
Surr: 1,2-Dichloroethane-d4	95.7	0	72-119		%REC	1	09/29/22 12:44 PM
Surr: 4-Bromofluorobenzene	99.3	0	76-119		%REC	1	09/29/22 12:44 PM
Surr: Dibromofluoromethane	97.4	0	85-115		%REC	1	09/29/22 12:44 PM
Surr: Toluene-d8	101	0	81-120		%REC	1	09/29/22 12:44 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
	DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
	S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc. **Date:** *05-Oct-22*

CLIENT: GHD
Work Order: 2209249
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_220930A

The QC data in batch 107179 applies to the following samples: 2209249-01C

Sample ID: **MB-107179** Batch ID: **107179** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_220930A** Analysis Date: **9/30/2022 11:08:02 AM** Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0737		0.1000		73.7	25	124			
Surr: Octacosane	0.0871		0.1000		87.1	51	124			

Sample ID: **LCS-107179** Batch ID: **107179** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_220930A** Analysis Date: **9/30/2022 11:17:06 AM** Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.18	0.100	1.250	0	94.7	50	114			
Surr: Isopropylbenzene	0.0728		0.1000		72.8	25	124			
Surr: Octacosane	0.0862		0.1000		86.2	51	124			

Sample ID: **LCSD-107179** Batch ID: **107179** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_220930A** Analysis Date: **9/30/2022 11:26:09 AM** Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.18	0.100	1.250	0	94.7	50	114	0.017	30	
Surr: Isopropylbenzene	0.0772		0.1000		77.2	25	124	0	0	
Surr: Octacosane	0.0896		0.1000		89.6	51	124	0	0	

Qualifiers:				
	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2209249
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_221003A

The QC data in batch 107221 applies to the following samples: 2209249-01B, 2209249-02B

Sample ID: **LCS-107221**	Batch ID: **107221**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCS**	Run ID: **GC4_221003A**	Analysis Date: **10/3/2022 10:45:39 AM**	Prep Date: **10/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.50	0.100	2.500	0	100	67	136			
Surr: Tetrachlorethene	0.353		0.4000		88.3	74	138			

Sample ID: **LCSD-107221**	Batch ID: **107221**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCSD**	Run ID: **GC4_221003A**	Analysis Date: **10/3/2022 11:10:20 AM**	Prep Date: **10/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.65	0.100	2.500	0	106	67	136	5.83	30	
Surr: Tetrachlorethene	0.366		0.4000		91.5	74	138	0	0	

Sample ID: **MB-107221**	Batch ID: **107221**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MBLK**	Run ID: **GC4_221003A**	Analysis Date: **10/3/2022 12:21:11 PM**	Prep Date: **10/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.380		0.4000		95.1	74	138			

Sample ID: **2209248-06BMS**	Batch ID: **107221**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MS**	Run ID: **GC4_221003A**	Analysis Date: **10/3/2022 6:07:40 PM**	Prep Date: **10/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.02	0.100	2.500	0	80.9	67	136			
Surr: Tetrachlorethene	0.313		0.4000		78.2	74	138			

Sample ID: **2209248-06BMSD**	Batch ID: **107221**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MSD**	Run ID: **GC4_221003A**	Analysis Date: **10/3/2022 6:30:04 PM**	Prep Date: **10/3/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.29	0.100	2.500	0	91.6	67	136	12.4	30	
Surr: Tetrachlorethene	0.345		0.4000		86.2	74	138	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2209249
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_220929B

The QC data in batch 107184 applies to the following samples: 2209249-01A, 2209249-02A

Sample ID: **LCS-107184** Batch ID: **107184** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS5_220929B** Analysis Date: **9/29/2022 10:34:00 AM** Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0239	0.00100	0.0232	0	103	81	122			
Ethylbenzene	0.0238	0.00100	0.0232	0	103	80	120			
m,p-Xylene	0.0487	0.00200	0.0464	0	105	80	120			
o-Xylene	0.0244	0.00100	0.0232	0	105	80	120			
Toluene	0.0238	0.00200	0.0232	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	188		200.0		93.8	72	119			
Surr: 4-Bromofluorobenzene	197		200.0		98.3	76	119			
Surr: Dibromofluoromethane	195		200.0		97.6	85	115			
Surr: Toluene-d8	203		200.0		102	81	120			

Sample ID: **MB-107184** Batch ID: **107184** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS5_220929B** Analysis Date: **9/29/2022 11:26:00 AM** Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100								
Ethylbenzene	<0.000300	0.00100								
m,p-Xylene	<0.000600	0.00200								
o-Xylene	<0.000300	0.00100								
Toluene	<0.000600	0.00200								
Surr: 1,2-Dichloroethane-d4	193		200.0		96.3	72	119			
Surr: 4-Bromofluorobenzene	201		200.0		100	76	119			
Surr: Dibromofluoromethane	194		200.0		97.2	85	115			
Surr: Toluene-d8	204		200.0		102	81	120			

Sample ID: **2209190-01AMSD** Batch ID: **107184** TestNo: **SW8260D** Units: **mg/L**
SampType: **MSD** Run ID: **GCMS5_220929B** Analysis Date: **9/29/2022 7:38:00 PM** Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.246	0.0100	0.232	0	106	81	122	5.04	20	
Ethylbenzene	0.245	0.0100	0.232	0	106	80	120	2.62	20	
m,p-Xylene	0.501	0.0200	0.464	0	108	80	120	1.65	20	
o-Xylene	0.248	0.0100	0.232	0	107	80	120	3.18	20	
Toluene	0.247	0.0200	0.232	0	106	80	120	5.04	20	
Surr: 1,2-Dichloroethane-d4	1880		2000		94.1	72	119	0	0	
Surr: 4-Bromofluorobenzene	1970		2000		98.3	76	119	0	0	
Surr: Dibromofluoromethane	1950		2000		97.6	85	115	0	0	
Surr: Toluene-d8	2000		2000		100	81	120	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2209249
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_220929B

Sample ID: **SB-221004**	Batch ID: **107184**	TestNo: **SW8260D**	Units: **mg/L**
SampType: **SBLK**	Run ID: **GCMS5_220929B**	Analysis Date: **10/4/2022 11:20:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100	0							
Ethylbenzene	<0.000300	0.00100	0							
m,p-Xylene	<0.000600	0.00200	0							
o-Xylene	<0.000300	0.00100	0							
Toluene	<0.000600	0.00200	0							
Surr: 1,2-Dichloroethane-d4	191		0							
Surr: 4-Bromofluorobenzene	196		0							
Surr: Dibromofluoromethane	194		0							
Surr: Toluene-d8	200		0							

Sample ID: **2209190-01AMS**	Batch ID: **107184**	TestNo: **SW8260D**	Units: **mg/L**
SampType: **MS**	Run ID: **GCMS5_220929B**	Analysis Date: **10/4/2022 11:46:00 AM**	Prep Date: **9/29/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.259	0.0100	0.232	0	112	81	122			
Ethylbenzene	0.252	0.0100	0.232	0	108	80	120			
m,p-Xylene	0.509	0.0200	0.464	0	110	80	120			
o-Xylene	0.256	0.0100	0.232	0	110	80	120			
Toluene	0.260	0.0200	0.232	0	112	80	120			
Surr: 1,2-Dichloroethane-d4	1880		2000		93.8	72	119			
Surr: 4-Bromofluorobenzene	1920		2000		96.0	76	119			
Surr: Dibromofluoromethane	1990		2000		99.4	85	115			
Surr: Toluene-d8	2000		2000		100	81	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

December 19, 2022

Brad Stephenson
GHD
14998 W 6th Ave #800
Golden, CO 80401
TEL: (720) 974-0935
FAX (432) 686-0186

Order No.: 2212066

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 5 sample(s) on 12/8/2022 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-22-28

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. Round Rock, TX 78664
Phone 512.388.8222
Web: **www.dhlanalytical.com**
Email: **login@dhlanalytical.com**

CHAIN-OF-CUSTODY

PAGE 1 OF 1

CLIENT: GHD
ADDRESS: @ LAKEWOOD, CO
PHONE: 303 941 6156 EMAIL: BRAD.STEPHENSON
DATA REPORTED TO: BSTEPHENSON @GHD.COM
ADDITIONAL REPORT COPIES TO: J CLOUD

PO#:
PROJECT LOCATION OR NAME: HOBBS TANK
CLIENT PROJECT # 11224355

LABORATORY USE ONLY
DHL WORKORDER #: 2212066

COLLECTOR:

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

W=WATER L=LIQUID S=SOLID SO=SOLID SE=SEDIMENT P=PAINT SL=SLUDGE

Field Sample I.D.	Lab Use Only DHL Lab #	Collection Date	Collection Time	Matrix	Container Type	# of Containers	PRESERVATION HCL	PRESERVATION HNO_3	PRESERVATION H_2SO_4	PRESERVATION NaOH ☐ Zn Acetate ☐	PRESERVATION ICE ☐ UNPRESERVED ☐	ANALYSES BTEX ☐ MTBE ☐ [METHOD 8260]	TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐	GRO 8015 ☐ DRO 8015 ☐	VOC 8260 ☐ VOC 624.1 ☐	SVOC 8270 ☐ SVOC 625.1 ☐	PAH 8270 ☐ HOLD PAH ☐	PEST 8270 ☐ 625.1 ☐ O-P PEST 8270 ☐	PCB 8082 ☐ 608.3 ☐ PCB 8270 ☐ 625.1 ☐	HERB 8321 ☐ T PHOS ☐ AMMONIA ☐	METALS 6020 ☐ 200.8 ☐ DISS. METALS ☐	RCRA 8 ☐ TX11 ☐	pH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐	ANIONS 300 ☐ 9056 ☐	TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐	TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐	RCI ☐ IGN ☐ DGAS ☐ OIL&GREASE ☐	TDS ☐ TSS ☐ % MOIST ☐ CYANIDE ☐	FIELD NOTES
HTRW-1	01	12/7/22	0830	W		8						X		X															
MW5	02	"	0850	W		8						X		X															
MW5D	03	"	0850	W		8						X		X															
MW4	04	12/7/22	0915	W		8						X		X															
TRIP	05					4						X		X Bzo															

Relinquished By: (Sign)	DATE/TIME	Received by:
	12/7/22	FEDEX
Relinquished By: (Sign) Fedex	DATE/TIME 12/8/22 0907	Received by:
Relinquished By: (Sign)	DATE/TIME	Received by:

TURN AROUND TIME (CALL FIRST FOR RUSH)
RUSH-1 DAY☐ RUSH-2 DAY☐ RUSH-3 DAY☐
NORMAL ☐ OTHER ☐
DUE DATE _____ ☐

LABORATORY USE ONLY
RECEIVING TEMP (°C): 5.6°C THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☑ NOT USED
CARRIER: ☐ LSO ☑ FEDEX ☐ UPS ☐ COURIER ☐ OTHER ☐ HAND DELIVERED

☐ DHL DISPOSAL @ 5.00 each ☐ Return

DHL COC REV 3 | MAR 2021

ORIGIN ID:HOBA (000) 000-0000

GHD
14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 07DEC22
ACTWGT: 31.45 LB
CAD: 6994246/SSFE2341
DIMS: 23x13x14 IN

BILL THIRD PARTY

TO DHL ANALYTICAL
DHL ANALYTICAL
2300 DOUBLE CREEK DR

ROUND ROCK TX 78664
(512) 388-8222 REF:
INV:
PO: DEPT:

FedEx
Express

REL#
3785346

1 of 2
TRK# 0201 3918 2659 2466
MASTER
A8 BSMA

THU - 08 DEC 10:30A
PRIORITY OVERNIGHT
AHS
78664
TX-US AUS

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name: **GHD** Date Received: **12/8/2022**

Work Order Number: **2212066** Received by: **KAO**

Checklist completed by: _____ 12/8/2022 Reviewed by: _____ 12/8/2022
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐ NA ☐
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Cooler #	1
Temp °C	5.6
Seal Intact	NP

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *19-Dec-22*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2212066

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

M8015D, M8015V and SW8260D.

For DRO analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

DHL Analytical, Inc.

Date: *19-Dec-22*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2212066-01
Project No:	11224355	**Collection Date:**	12/07/22 08:30 AM
Lab Order:	2212066	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.149	0.149	0.186		mg/L	1	12/15/22 02:23 PM
Surr: Isopropylbenzene	77.4	0	25-124		%REC	1	12/15/22 02:23 PM
Surr: Octacosane	84.2	0	51-124		%REC	1	12/15/22 02:23 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/13/22 01:09 PM
Surr: Tetrachlorethene	98.9	0	74-138		%REC	1	12/13/22 01:09 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:12 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:12 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 06:12 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:12 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 06:12 PM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:12 PM
Surr: 1,2-Dichloroethane-d4	91.6	0	72-119		%REC	1	12/08/22 06:12 PM
Surr: 4-Bromofluorobenzene	100	0	76-119		%REC	1	12/08/22 06:12 PM
Surr: Dibromofluoromethane	96.7	0	85-115		%REC	1	12/08/22 06:12 PM
Surr: Toluene-d8	101	0	81-120		%REC	1	12/08/22 06:12 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *19-Dec-22*

CLIENT:	GHD	**Client Sample ID:**	MW5
Project:	Hobbs Tank	**Lab ID:**	2212066-02
Project No:	11224355	**Collection Date:**	12/07/22 08:50 AM
Lab Order:	2212066	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.147	0.147	0.184		mg/L	1	12/15/22 02:32 PM
Surr: Isopropylbenzene	82.1	0	25-124		%REC	1	12/15/22 02:32 PM
Surr: Octacosane	78.8	0	51-124		%REC	1	12/15/22 02:32 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/13/22 01:32 PM
Surr: Tetrachlorethene	99.2	0	74-138		%REC	1	12/13/22 01:32 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:38 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:38 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 06:38 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:38 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 06:38 PM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 06:38 PM
Surr: 1,2-Dichloroethane-d4	91.1	0	72-119		%REC	1	12/08/22 06:38 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	12/08/22 06:38 PM
Surr: Dibromofluoromethane	97.3	0	85-115		%REC	1	12/08/22 06:38 PM
Surr: Toluene-d8	100	0	81-120		%REC	1	12/08/22 06:38 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *19-Dec-22*

CLIENT:	GHD	**Client Sample ID:**	MW5D
Project:	Hobbs Tank	**Lab ID:**	2212066-03
Project No:	11224355	**Collection Date:**	12/07/22 08:50 AM
Lab Order:	2212066	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.148	0.148	0.186		mg/L	1	12/15/22 02:41 PM
Surr: Isopropylbenzene	72.6	0	25-124		%REC	1	12/15/22 02:41 PM
Surr: Octacosane	79.9	0	51-124		%REC	1	12/15/22 02:41 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/13/22 01:53 PM
Surr: Tetrachlorethene	99.2	0	74-138		%REC	1	12/13/22 01:53 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:04 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:04 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 07:04 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:04 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 07:04 PM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:04 PM
Surr: 1,2-Dichloroethane-d4	91.4	0	72-119		%REC	1	12/08/22 07:04 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	12/08/22 07:04 PM
Surr: Dibromofluoromethane	97.1	0	85-115		%REC	1	12/08/22 07:04 PM
Surr: Toluene-d8	100	0	81-120		%REC	1	12/08/22 07:04 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *19-Dec-22*

CLIENT:	GHD	**Client Sample ID:**	MW4
Project:	Hobbs Tank	**Lab ID:**	2212066-04
Project No:	11224355	**Collection Date:**	12/07/22 09:15 AM
Lab Order:	2212066	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.157	0.157	0.197		mg/L	1	12/15/22 02:50 PM
Surr: Isopropylbenzene	78.9	0	25-124		%REC	1	12/15/22 02:50 PM
Surr: Octacosane	82.4	0	51-124		%REC	1	12/15/22 02:50 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/13/22 02:15 PM
Surr: Tetrachlorethene	100	0	74-138		%REC	1	12/13/22 02:15 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:30 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:30 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 07:30 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:30 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 07:30 PM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 07:30 PM
Surr: 1,2-Dichloroethane-d4	89.6	0	72-119		%REC	1	12/08/22 07:30 PM
Surr: 4-Bromofluorobenzene	98.9	0	76-119		%REC	1	12/08/22 07:30 PM
Surr: Dibromofluoromethane	97.9	0	85-115		%REC	1	12/08/22 07:30 PM
Surr: Toluene-d8	101	0	81-120		%REC	1	12/08/22 07:30 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: *19-Dec-22*

CLIENT:	GHD	**Client Sample ID:**	Trip
Project:	Hobbs Tank	**Lab ID:**	2212066-05
Project No:	11224355	**Collection Date:**	12/07/22
Lab Order:	2212066	**Matrix:**	TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/13/22 12:25 PM
Surr: Tetrachlorethene	99.5	0	74-138		%REC	1	12/13/22 12:25 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **JVR**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 04:28 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 04:28 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 04:28 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 04:28 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/08/22 04:28 PM
Total Xylenes	<0.000300	0.000300	0.00100		mg/L	1	12/08/22 04:28 PM
Surr: 1,2-Dichloroethane-d4	92.6	0	72-119		%REC	1	12/08/22 04:28 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	12/08/22 04:28 PM
Surr: Dibromofluoromethane	95.3	0	85-115		%REC	1	12/08/22 04:28 PM
Surr: Toluene-d8	100	0	81-120		%REC	1	12/08/22 04:28 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor	E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	RL	Reporting Limit
S	Spike Recovery outside control limits	N	Parameter not NELAP certified

DHL Analytical, Inc. **Date:** *19-Dec-22*

CLIENT: GHD
Work Order: 2212066
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_221215A

The QC data in batch 108077 applies to the following samples: 2212066-01C, 2212066-02C, 2212066-03C, 2212066-04C

Sample ID: **LCS-108077** Batch ID: **108077** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_221215A** Analysis Date: **12/15/2022 1:15:40 PM** Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.991	0.100	1.250	0	79.2	50	114			
Surr: Isopropylbenzene	0.0683		0.1000		68.3	25	124			
Surr: Octacosane	0.0833		0.1000		83.3	51	124			

Sample ID: **LCSD-108077** Batch ID: **108077** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_221215A** Analysis Date: **12/15/2022 1:24:44 PM** Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.939	0.100	1.250	0	75.1	50	114	5.33	30	
Surr: Isopropylbenzene	0.0865		0.1000		86.5	25	124	0	0	
Surr: Octacosane	0.0835		0.1000		83.5	51	124	0	0	

Sample ID: **MB-108077** Batch ID: **108077** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_221215A** Analysis Date: **12/15/2022 4:01:25 PM** Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0803		0.1000		80.3	25	124			
Surr: Octacosane	0.0966		0.1000		96.6	51	124			

Qualifiers:				
	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2212066
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_221213A

The QC data in batch 108080 applies to the following samples: 2212066-01B, 2212066-02B, 2212066-03B, 2212066-04B, 2212066-05B

Sample ID: **LCS-108080**	Batch ID: **108080**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCS**	Run ID: **GC4_221213A**	Analysis Date: **12/13/2022 10:33:24 A**	Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.88	0.100	2.500	0	115	67	136			
Surr: Tetrachlorethene	0.354		0.4000		88.6	74	138			

Sample ID: **LCSD-108080**	Batch ID: **108080**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCSD**	Run ID: **GC4_221213A**	Analysis Date: **12/13/2022 10:55:45 A**	Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.98	0.100	2.500	0	119	67	136	3.35	30	
Surr: Tetrachlorethene	0.377		0.4000		94.2	74	138	0	0	

Sample ID: **MB-108080**	Batch ID: **108080**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MBLK**	Run ID: **GC4_221213A**	Analysis Date: **12/13/2022 12:02:46 P**	Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.383		0.4000		95.7	74	138			

Sample ID: **2212067-03BMS**	Batch ID: **108080**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MS**	Run ID: **GC4_221213A**	Analysis Date: **12/13/2022 7:04:37 PM**	Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.04	0.100	2.500	0	81.4	67	136			
Surr: Tetrachlorethene	0.305		0.4000		76.2	74	138			

Sample ID: **2212067-03BMSD**	Batch ID: **108080**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MSD**	Run ID: **GC4_221213A**	Analysis Date: **12/13/2022 7:27:28 PM**	Prep Date: **12/13/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.49	0.100	2.500	0	99.6	67	136	20.1	30	
Surr: Tetrachlorethene	0.353		0.4000		88.4	74	138	0	0	

Qualifiers:				
	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2212066
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_221208A

The QC data in batch 108041 applies to the following samples: 2212066-01A, 2212066-02A, 2212066-03A, 2212066-04A, 2212066-05A

Sample ID: **LCS-108041** Batch ID: **108041** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS5_221208A** Analysis Date: **12/8/2022 2:30:00 PM** Prep Date: **12/8/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0256	0.00100	0.0232	0	110	81	122			
Ethylbenzene	0.0254	0.00100	0.0232	0	110	80	120			
m,p-Xylene	0.0519	0.00200	0.0464	0	112	80	120			
o-Xylene	0.0262	0.00100	0.0232	0	113	80	120			
Toluene	0.0260	0.00200	0.0232	0	112	80	120			
Total Xylenes	0.0781	0.00100	0.0696	0	112	80	120			
Surr: 1,2-Dichloroethane-d4	182		200.0		90.8	72	119			
Surr: 4-Bromofluorobenzene	193		200.0		96.3	76	119			
Surr: Dibromofluoromethane	199		200.0		99.4	85	115			
Surr: Toluene-d8	196		200.0		97.8	81	120			

Sample ID: **MB-108041** Batch ID: **108041** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS5_221208A** Analysis Date: **12/8/2022 4:02:00 PM** Prep Date: **12/8/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100								
Ethylbenzene	<0.000300	0.00100								
m,p-Xylene	<0.000600	0.00200								
o-Xylene	<0.000300	0.00100								
Toluene	<0.000600	0.00200								
Total Xylenes	<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4	185		200.0		92.4	72	119			
Surr: 4-Bromofluorobenzene	203		200.0		102	76	119			
Surr: Dibromofluoromethane	191		200.0		95.6	85	115			
Surr: Toluene-d8	199		200.0		99.7	81	120			

Sample ID: **SB-221209** Batch ID: **108041** TestNo: **SW8260D** Units: **mg/L**
SampType: **SBLK** Run ID: **GCMS5_221208A** Analysis Date: **12/9/2022 2:16:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100	0							
Ethylbenzene	<0.000300	0.00100	0							
m,p-Xylene	<0.000600	0.00200	0							
o-Xylene	<0.000300	0.00100	0							
Toluene	<0.000600	0.00200	0							
Total Xylenes	<0.000300	0.00100	0							
Surr: 1,2-Dichloroethane-d4	188		0							
Surr: 4-Bromofluorobenzene	196		0							
Surr: Dibromofluoromethane	192		0							
Surr: Toluene-d8	206		0							

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GHD
Work Order: 2212066
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_221208A

Sample ID: **2212072-06AMS**	Batch ID: **108041**	TestNo: **SW8260D**	Units: **mg/L**
SampType: **MS**	Run ID: **GCMS5_221208A**	Analysis Date: **12/9/2022 4:00:00 PM**	Prep Date: **12/8/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0256	0.00100	0.0232	0	110	81	122			
Ethylbenzene	0.0265	0.00100	0.0232	0	114	80	120			
m,p-Xylene	0.0540	0.00200	0.0464	0	116	80	120			
o-Xylene	0.0270	0.00100	0.0232	0	117	80	120			
Toluene	0.0259	0.00200	0.0232	0	112	80	120			
Total Xylenes	0.0810	0.00100	0.0696	0	116	80	120			
Surr: 1,2-Dichloroethane-d4	176		200.0		88.2	72	119			
Surr: 4-Bromofluorobenzene	193		200.0		96.5	76	119			
Surr: Dibromofluoromethane	180		200.0		90.2	85	115			
Surr: Toluene-d8	203		200.0		102	81	120			

Sample ID: **2212072-06AMSD**	Batch ID: **108041**	TestNo: **SW8260D**	Units: **mg/L**
SampType: **MSD**	Run ID: **GCMS5_221208A**	Analysis Date: **12/9/2022 4:27:00 PM**	Prep Date: **12/8/2022**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0242	0.00100	0.0232	0	104	81	122	5.70	20	
Ethylbenzene	0.0251	0.00100	0.0232	0	108	80	120	5.47	20	
m,p-Xylene	0.0513	0.00200	0.0464	0	111	80	120	5.12	20	
o-Xylene	0.0256	0.00100	0.0232	0	110	80	120	5.38	20	
Toluene	0.0244	0.00200	0.0232	0	105	80	120	6.33	20	
Total Xylenes	0.0769	0.00100	0.0696	0	110	80	120	5.20	20	
Surr: 1,2-Dichloroethane-d4	184		200.0		92.0	72	119	0	0	
Surr: 4-Bromofluorobenzene	195		200.0		97.3	76	119	0	0	
Surr: Dibromofluoromethane	189		200.0		94.3	85	115	0	0	
Surr: Toluene-d8	201		200.0		101	81	120	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

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District IV
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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 201987

CONDITIONS

Operator: HF Sinclair Navajo Refining LLC ATTN: GENERAL COUNSEL Dallas, TX 75201	OGRID: 15694
	Action Number: 201987
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Site Status Report 2022 for Hobbs Tank 5201 Release: Content Satisfactory 1. Continue air sparging as recommend and approved by the NMOCD. 2. Install Oxygen Release Socks in the same well as the one used for air sparging, HTRW-1 and in wells RW-1, HTRW-3 to increase biodegradation of TPH in area. 3. Continue to groundwater monitor and send 2023 report no later than April 1, 2024.	8/9/2023