APPROVED
By Nelson Velez at 4:35 pm, Jan 03, 2022

Review of 2020 Supplemental Site Closure Report: Content satisfactory

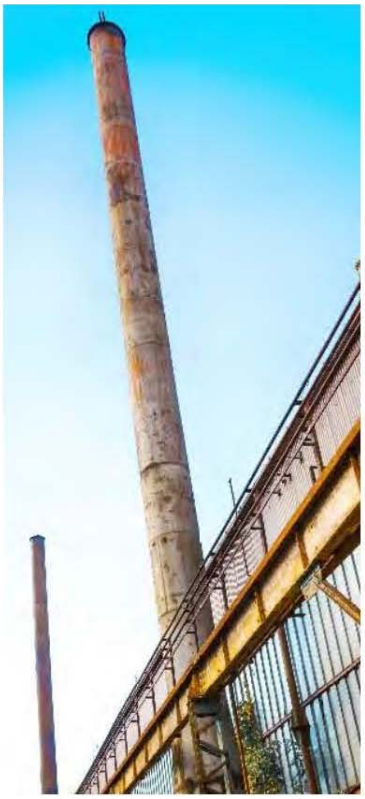
1. Follow recommendations stated within 2020 Supplemental Site Closure Report.
   a. Recondition well HTRW-1 using a vacuum truck, Cool-OX solution, and air sparging
   b. Well HTRW-1 to be sampled quarterly
   c. All other wells will be sampled bi-annually if sufficient water is present
   d. All groundwater samples to be analyzed for BTEX per US EPA Method 8260B
   e. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022

Supplemental Site Closure Report for 2020

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

April 2021

HollyFrontier



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1. Introduction

This 2020 status report is submitted by GHD Services, Inc. (GHD), on behalf of HollyFrontier for the Hobbs Tank 5201 Release, AP-113, (Site), located in Lea County, New Mexico (**Figure 1**). This report is a supplement to the Site Closure Report submitted in July 2019 and the supplemental report submitted in April 2020. The C-141 notification for the release was submitted to the New Mexico Oil Conservation District (NMOCD) on July 22, 2004. Annual Status reports previously submitted to NMOCD were submitted in 2013, 2014, 2015, 2016, and 2017. This report includes the status of groundwater monitoring and remediation at the Site for the period from March 2020 to December 2020.

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 HollyFrontier 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. (SES) 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. 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**).

SES 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 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 negligible amounts of recoverable oil were remaining in the area. Since 2015, Enhanced Fluid Recovery (EFR) using a vacuum truck was 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 and are currently in use in wells MW-1, RW-1, and HTRW-3.

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 has shown oil since 2013 and has contained less than 0.10 feet or none since February 2018 (**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 3 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 and south 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) 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. There are no surface-water bodies within 1,000 feet of the Site. Due to the depth of groundwater (50 ft-bgs), it is unlikely that any perennial stream would exist at any time within 1,000 feet of the Site.

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. Well HTRW-1 has had detections of benzene above the standard varying from 1.97 µg/L to 1,620 µg/L. In December 2019, the benzene concentration (the only constituent above state NMWQCC standards) in this well was 57.5 µg/L and in December 2020 the benzene concentration was 626 µg/L (Table 1).

The wells that are located within proximity to the release have contained crude oil sporadically since 2012 (**Appendix A**). In December 2012, MW-1 had a measured thickness of 3.23 feet and nearby recovery well RW-1 had a thickness of 3.01 feet. In 2020, the only wells that showed measured oil were MW-1 at 0.07 feet in March 2020 and HTRW-3 at 0.02 feet in June 2020. All other wells in 2020 did not show any measured oil.

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 micrograms per liter (µg/L) for benzene
- 1000 µg/L for toluene
- 700 µg/L for ethylbenzene
- 620 µg/L for total xylenes

The only detection of benzene above the standard outside the berm area was detected in well MW-2 at 72 µg/L in January 2005. Presently, the only well with a detection of benzene above the standard is located within the berm area in well HTRW-1 at 626 µg/L, which last showed measured PSH in 2016. 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 (**Table 2**). The analyses showed none of these constituents were above state standards in 2019 and 2020 (**Table 2**).

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.

The crude oil that was released has a very low mobility and does not readily desorb nor dissolve and therefore it has remained in the immediate area of the release. Since 2004, the crude oil has only been measured in wells in the release area and has not migrated from the release area. Presently, the crude oil was not measured in any wells or in the area of the release.

2. Site Activities

Groundwater monitoring was conducted at the Site by GHD for 2020 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), RCRA metals, TDS and chloride analyses.

Enhanced Fluid Recovery (EFR) using a vacuum truck to recover crude oil has been used on wells MW-1, RW-1 and HTRW-3, in the release area, since December 2014 on a quarterly basis and from December 2016 to June 2018 on a monthly basis. Since June 2018, only oil absorbent socks have been used in these wells.

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 2020, groundwater samples were collected on a quarterly basis from the monitor wells MW-3, MW-4, and MW-5, and from recovery well HTRW-1. Groundwater samples were not collected from monitoring well MW-2 in 2020, as it was dry all year. **Appendix A** shows historical fluid levels from 2012 to December 2020. Table 1 summarizes hydrocarbon analytical results for March 2019 to December 2020. **Table 2** summarizes the inorganic results for 2019 and 2020. **Appendix B** summarizes historical analytical results from August 2004 to December 2020.

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. RCRA metals were analyzed by Methods 6020 and 7420, chloride by Method E300 and TDS by Method M2540. 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 2020

In March 2020, crude oil was measured in one well, MW-1 at 0.07 feet thick. Crude oil was not measured in any of the other wells. The crude oil thicknesses for March 2020 are shown in **Figure 3** and detailed in **Appendix A**.

Water levels measured in March 2020 were generally 0.10 feet lower than water levels measured in December 2019. For the March 2020 monitoring period, the groundwater flow (**Figure 4**) was towards the southeast with a gradient of 0.001 ft/ft (0.001 ft/ft in March 2019).

The March 2020 hydrocarbon concentrations for each sampled well are shown in Table 1**, Figure 8** and in **Appendix B**. **Figure 9** shows the results of the inorganic analyses. Well MW-2 was not sampled due to insufficient water in the well. The March 2020 laboratory report is contained **Appendix C**.

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

- None of the BTEX constituents were detected above NMWQCC standards in wells MW-3, MW-4, MW-5 and HTRW-1;
- Benzene was detected below the NMWQCC standard in well HTRW-1 at 2.28 µg/L;
- TPH-GRO were not detected above the lower laboratory reporting limit (0.06 mg/L) in any of the wells; and
- TPH-DRO were detected above the lower laboratory reporting limit in wells MW-3 at 0.190 mg/L, MW-5 at 0.235, and HTRW-1 at 0.222 mg/L.

Concentrations of dissolved hydrocarbons in groundwater during the March 2020 monitoring period were not detected in wells above the NMWQCC standards inside and outside the berm area (**Figure 8**).

The results of the inorganic analyses for March 2020 showed none of the wells had any detections above the NMWQCC standards (**Table 2 and Figure 9**).

June 2020

In June 2020, crude oil was measured in one well HTRW-3 at 0.02 feet thick. Crude oil was not measured in any of the other wells. The crude oil thicknesses for June 2020 are shown in **Figure 3** and detailed in **Appendix A**.

Water levels measured in June 2020 were generally 0.10 feet lower than water levels measured in March 2020. For the June 2020 monitoring period, the groundwater flow (**Figure 5**) was towards the southeast with a gradient of 0.001 ft/ft (0.001 ft/ft in June 2019).

The June 2020 hydrocarbon concentrations for each sampled well are shown in **Table 1, Figure 8** and in **Appendix B**. **Figure 9** shows the results of the inorganic analyses. Well MW-2 was not sampled due to insufficient water in the well. The June 2020 laboratory report is contained **Appendix C**.

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

- None of the BTEX constituents were detected above the lower laboratory reporting limits in wells MW-3, MW-4, and MW-5;
- Benzene was detected above the NMWQCC standard in well HTRW-1 at 70.6 µg/L;
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in any of the Site wells;
- TPH-GRO was only detected above the lower laboratory reporting limit (0.06 mg/L) in one well HTRW-1 at 0.116 mg/L; and
- TPH-DRO were detected above the lower laboratory reporting limit in wells MW-3 at 0.151 mg/L, and HTRW-1 at 0.288 mg/L.

Concentrations of dissolved hydrocarbons in groundwater during the June 2020 monitoring period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 8**).

The results of the inorganic analyses for June 2020 showed none of the wells had any detections above the NMWQCC standards (**Table 2 and Figure 9**).

September 2020

In September 2020, crude oil was not measured in any of the wells. The crude oil thicknesses for September 2020 are shown in **Figure 3** and detailed in **Appendix A**.

Water levels measured in September 2020 were generally 0.10 feet lower than water levels measured in June 2020. For the September 2020 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 2019).

The September 2020 hydrocarbon concentrations for each sampled well are shown in **Table 1**, **Figure 8** and in **Appendix B**. **Figure 9** shows the results of the inorganic analyses. Well MW-2 was not sampled due to insufficient water in the well. The September 2020 laboratory report is contained **Appendix C**.

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

- None of the BTEX constituents were detected above the lower laboratory reporting limits in wells MW-3, MW-4 and MW-5;
- Benzene was detected above the NMWQCC standard in well HTRW-1 at 42.4 µg/L;
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in any of the Site wells;
- TPH-GRO was detected above the lower laboratory reporting limit in well HTRW-1 at 0.318 mg/L; and

- TPH-DRO were detected above the lower laboratory reporting limit in wells MW-3 at 0.225 mg/L, MW-4 at 0.183 mg/L, MW-5 at 0.223, and HTRW-1 at 0.263 mg/L.

Concentrations of dissolved hydrocarbons in groundwater during the September 2020 monitoring period were not detected in wells above the NMWQCC standards outside the berm area (**Figure 8**) as observed during all other monitoring periods. Within the berm area for the tank and near the point of the release, only benzene was detected above NMWQCC standard in recovery well HTRW-1 at a concentration of 135 mg/L (**Figure 8**).

The results of the inorganic analyses for September 2020 showed none of the constituents exceeded the NMWQCC standards in any of the wells (**Table 2 and Figure 9**).

December 2020

In December 2020, crude oil was not measured in any of the wells. The crude oil thicknesses for December 2020 are shown in **Figure 3** and detailed in **Appendix A**.

Water levels measured in December 2020 were generally 0.20 feet lower than water levels measured in September 2020. For the December 2020 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 2019).

The December 2020 hydrocarbon concentrations for each sampled well are shown in **Table 1**, **Figure 8** and in **Appendix B**. **Figure 9** shows the results of the inorganic analyses. Well MW-2 was not sampled due to insufficient water in the well. The December 2020 laboratory report is contained **Appendix C**.

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

- None of the BTEX constituents were detected above the lower laboratory reporting limits in wells MW-3, MW-4 and MW-5;
- Benzene was detected above the NMWQCC standard in well HTRW-1 at 626 µg/L;
- Toluene, ethyl-benzene and total xylenes were not detected above the NMWQCC standards in any of the Site wells;
- TPH-GRO were detected above the lower laboratory reporting limit in well HTRW-1 at 1.79 mg/L; and
- TPH-DRO were detected above the lower laboratory reporting limit in wells MW-5 at 0.173 and well HTRW-1 at 0.256 mg/L.

Concentrations of dissolved hydrocarbons in groundwater during the December 2020 monitoring period were not detected in wells above the NMWQCC standards outside the berm area **(Figure 8**) as observed during all other monitoring periods. Within the berm area for the tank and near the point of the release, only benzene was detected above NMWQCC standard in recovery well HTRW-1 at a concentration of 626 mg/L (**Figure 8**).

The results of the inorganic analyses for December 2020 showed none of the constituents exceeded the NMWQCC standards in any of the wells (**Table 2 and Figure 9**).

4. Crude Oil Recovery 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. From December 2015 to January 2018, EFR was used to recover the oil and oil absorbent socks have been used for any *de minimus* remaining oil since 2018. The crude oil thickness in Site wells for March 2020 to December 2020 is shown in **Figure 3** and detailed in **Appendix A**.

A *de minimus* amount of crude oil remains in the area near the release and has not recharged at a recoverable rate since March 2018 and has 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 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 PSH since March 2020 (**Figure 3**). The maximum crude oil thickness in HTRW-3 was measured at 1.70 in December 2015 and presently does not have any measured oil (**Figure 12**). 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 oil since 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. Presently, the Site total accumulated thickness of the crude oil as measured in all wells is 0.00 feet (**Figure 10**).

From September 2013 to December 2015, the system recovered approximately 39 gallons of crude oil. From 2016 to 2018, approximately 34 gallons were recovered using EFR. Currently, there is no recoverable crude oil remaining in any of the wells and oil absorbent socks are being used in wells MW-1, RW-1 and HTRW-3 to collect *de minimus* amounts of remaining oil.

5. 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 3** for this reporting period. Prior to sampling, the YSI water quality meter was calibrated with the appropriate standards.

Duplicate groundwater samples were collected in March 2020, June 2020, and September 2020. The duplicate samples were analyzed for BTEX, TPH-GRO, TPH-DRO, RCRA metals, chloride, and TDS. There was no difference in the duplicate results for BTEX, and TPH-GRO and a 5 to 11% difference in the results for TPH-DRO for the samples. The RCRA metals, chloride and TDS results varied from no difference to 10%.

Each cooler containing the groundwater samples was shipped to the laboratory with a temperature blank and a laboratory prepared trip blank. 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 3**). 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.

6. Conclusion

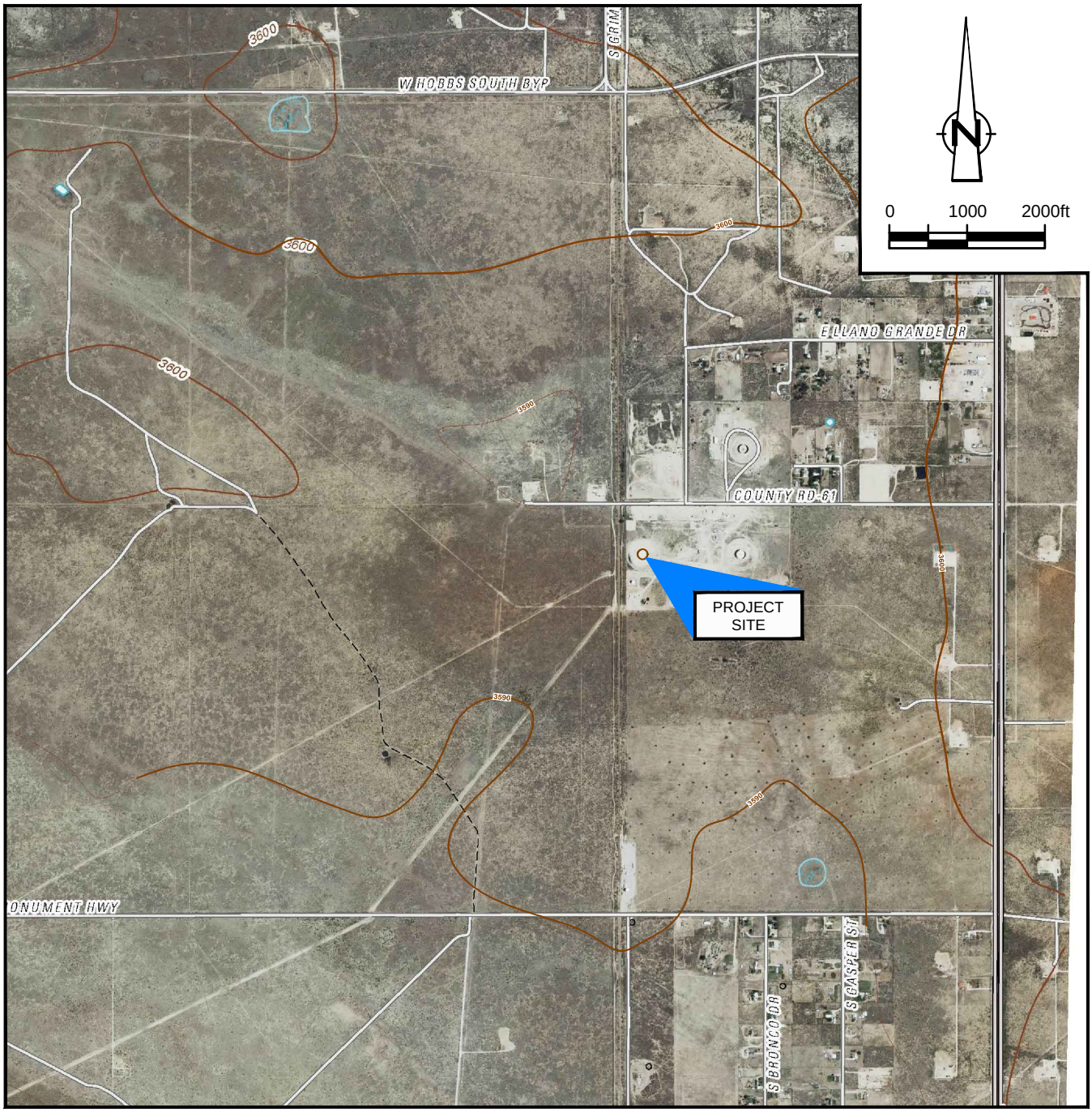
The crude oil thickness from the release has declined due to removal of the crude oil by pumping, the use of EFR and oil absorbent socks since 2012. Presently, there is only a *de minimus* amount of oil that remains in the Site wells periodically.

The following items based on discussion with NMOCD will be addressed in 2021:

- Recondition well HTRW-1 using a vacuum truck, Cool-OX solution, and air sparging.
- Well HTRW-1 will be sampled quarterly.
- All other wells will be sampled biannually if sufficient water is present.
- All groundwater samples will be analyzed for BTEX, GRO and DRO.
- There have been no detections of BTEX or PAHs above state standards outside the berm area or down-gradient of the release for more than 8 quarters and since 2011 (**Table 1 and Appendix B**).

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) to a *de minimus* amount. This requirement has been met and there has been more than 8 successive quarters of hydrocarbon concentrations that have been below state standards. At this time, GHD, on behalf of HollyFrontier, requested site closure and no further action at the Site in July 2019 and are awaiting a determination from NMOCD. Upon approval for site closure, all wells will be abandoned and plugged, and all equipment will be removed in 2021.

Figures



SOURCE: USGS 7.5 MINUTE QUAD
"HOBBS WEST AND HOBBS EAST, NEW MEXICO" DATED 2010

LAT/LONG: 32.6549° NORTH, 103.1382° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

figure 1

SITE LOCATION MAP
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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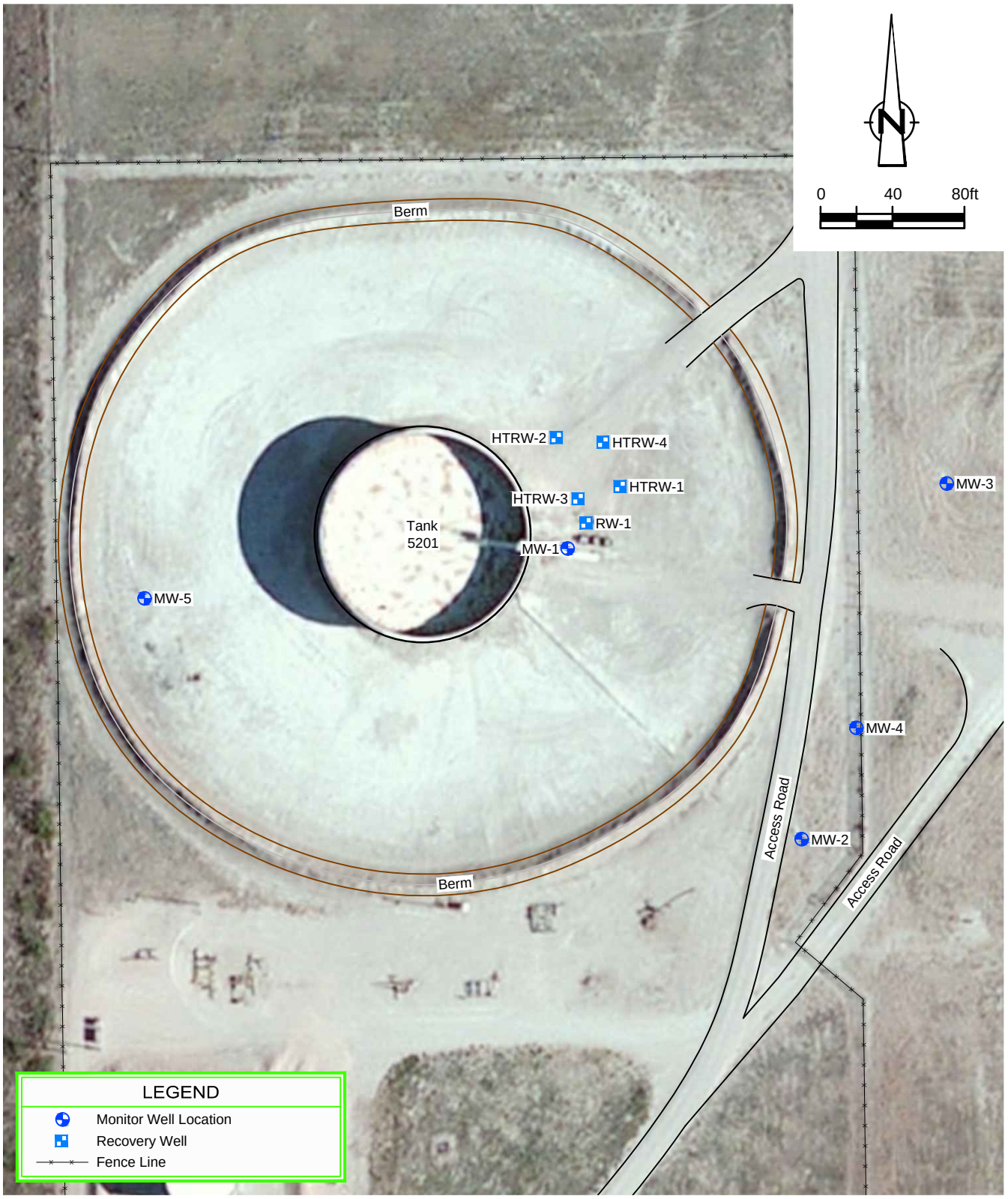

figure 2

SITE MAP
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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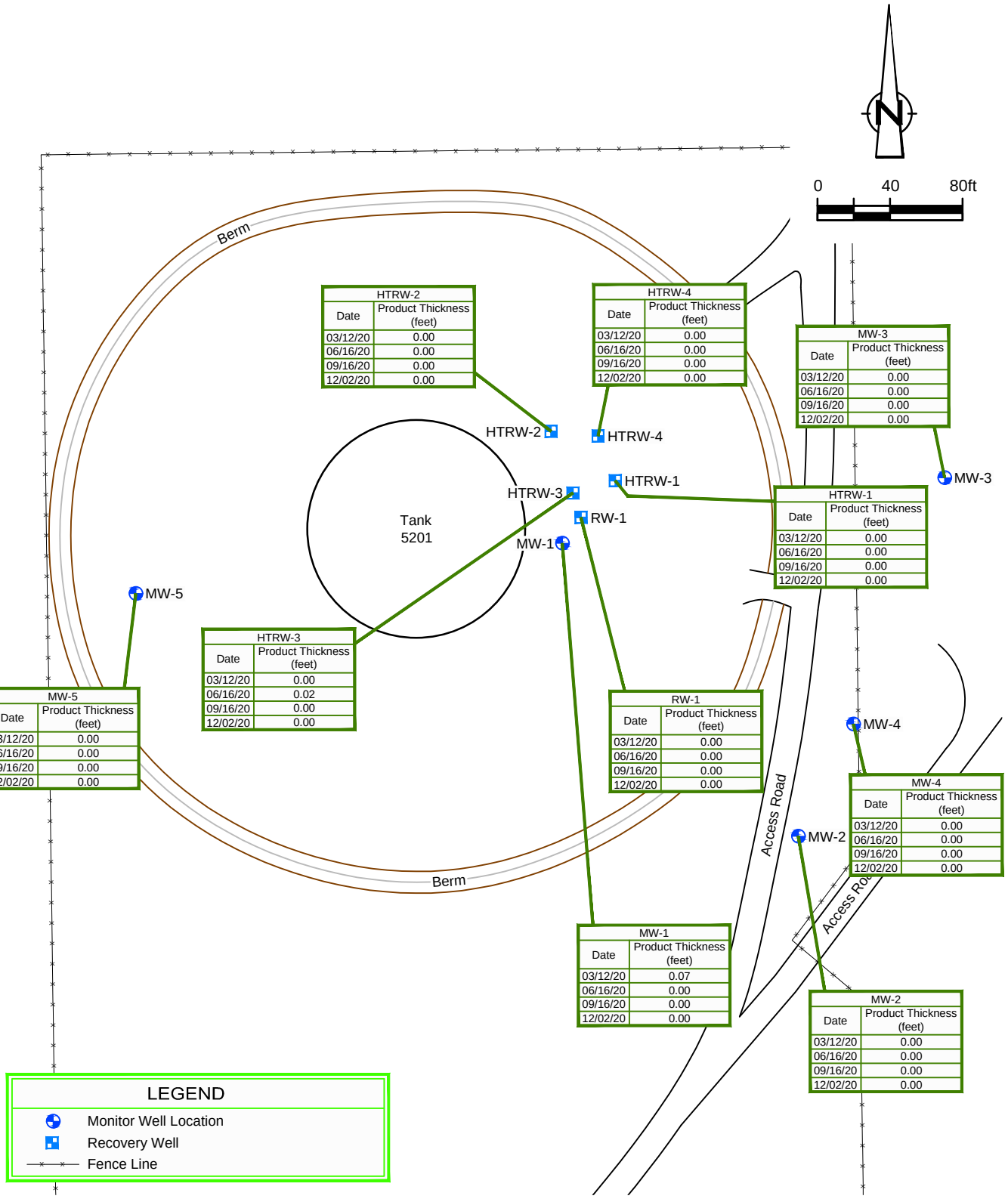

figure 3

PRODUCT THICKNESS MAP - MARCH 2020 TO DECEMBER 2020
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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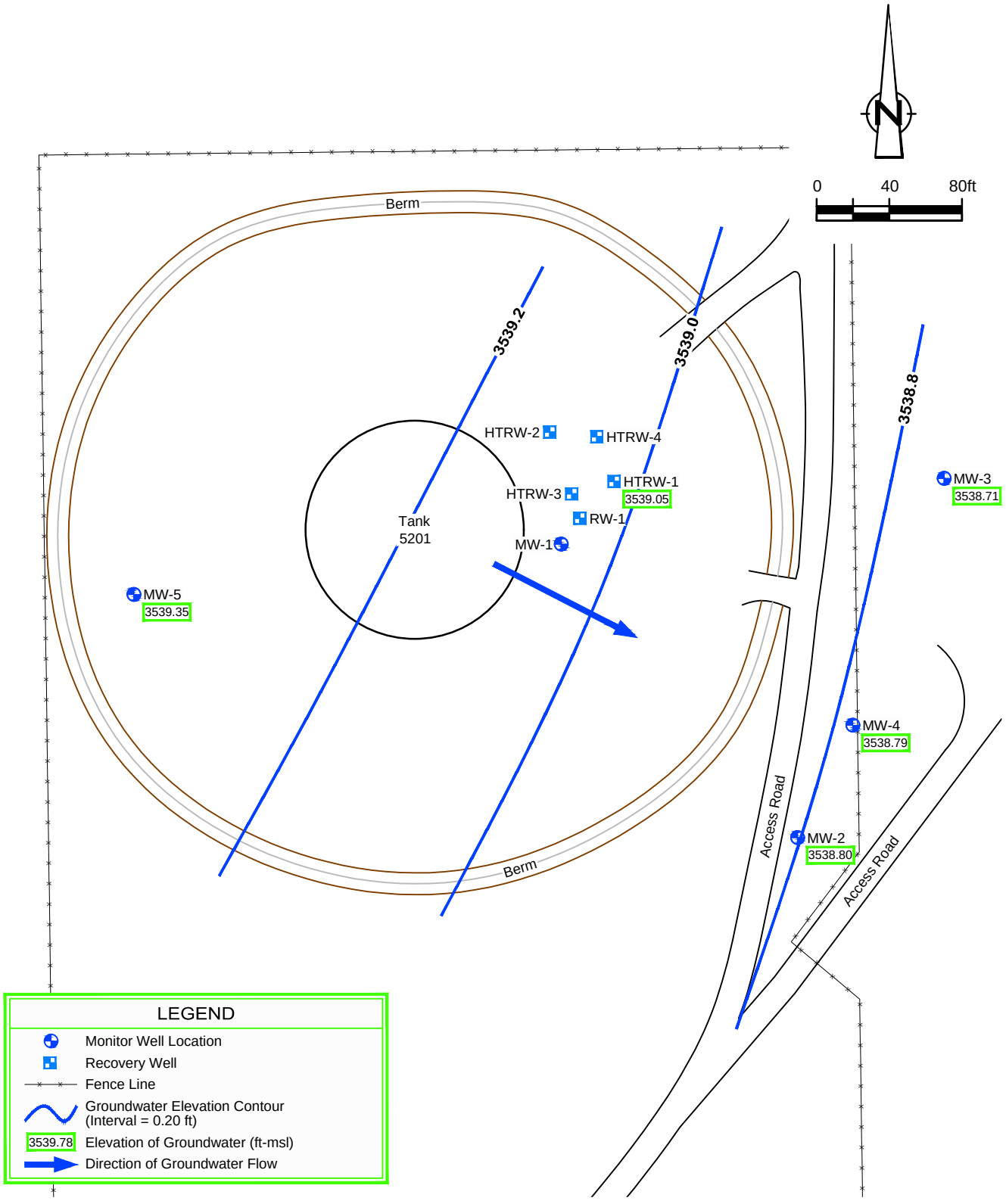

figure 4

GROUNDWATER SURFACE MAP - MARCH 2020
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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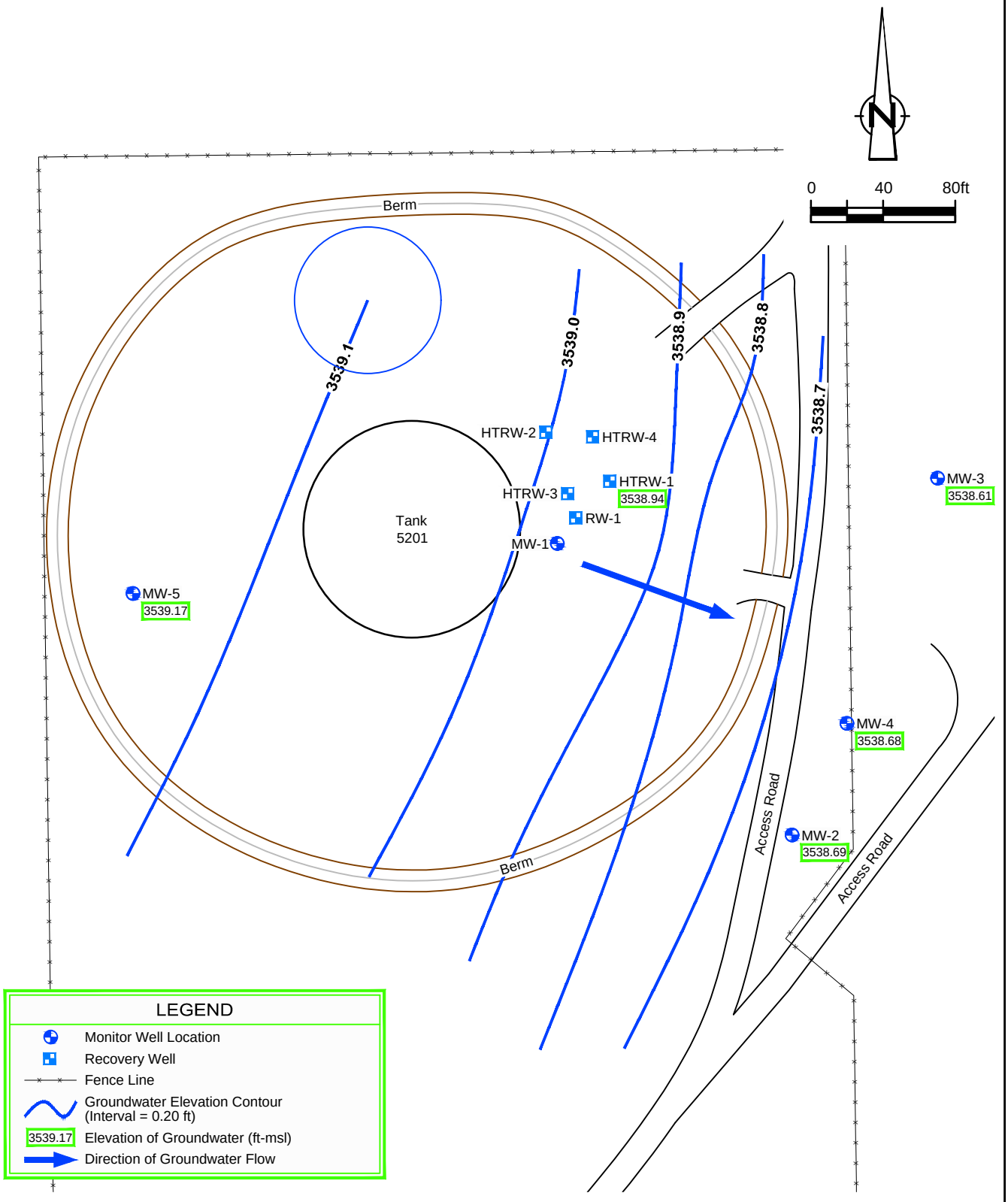

figure 5

GROUNDWATER SURFACE MAP - JUNE 2020
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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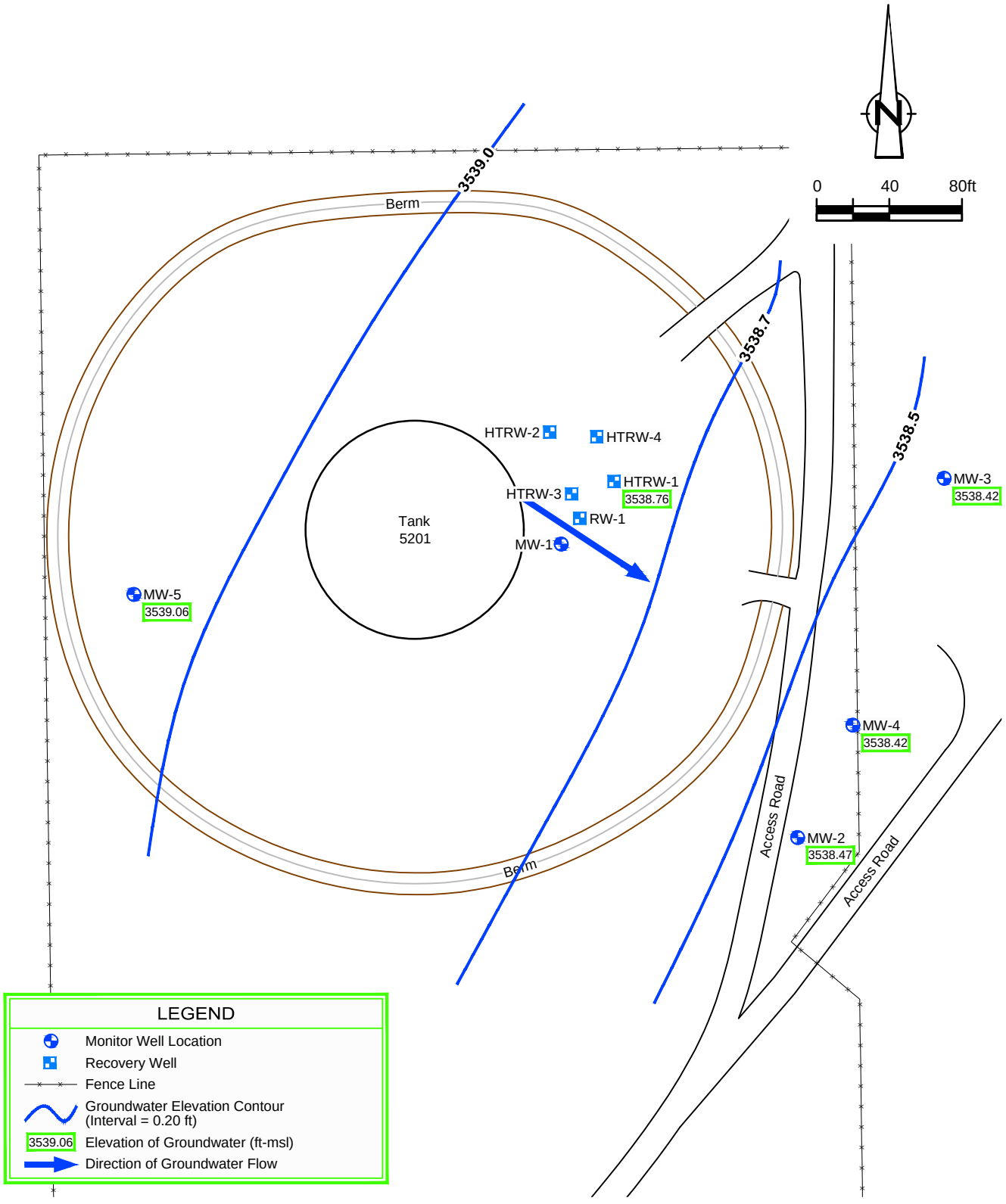

figure 6

GROUNDWATER SURFACE MAP - SEPTEMBER 2020
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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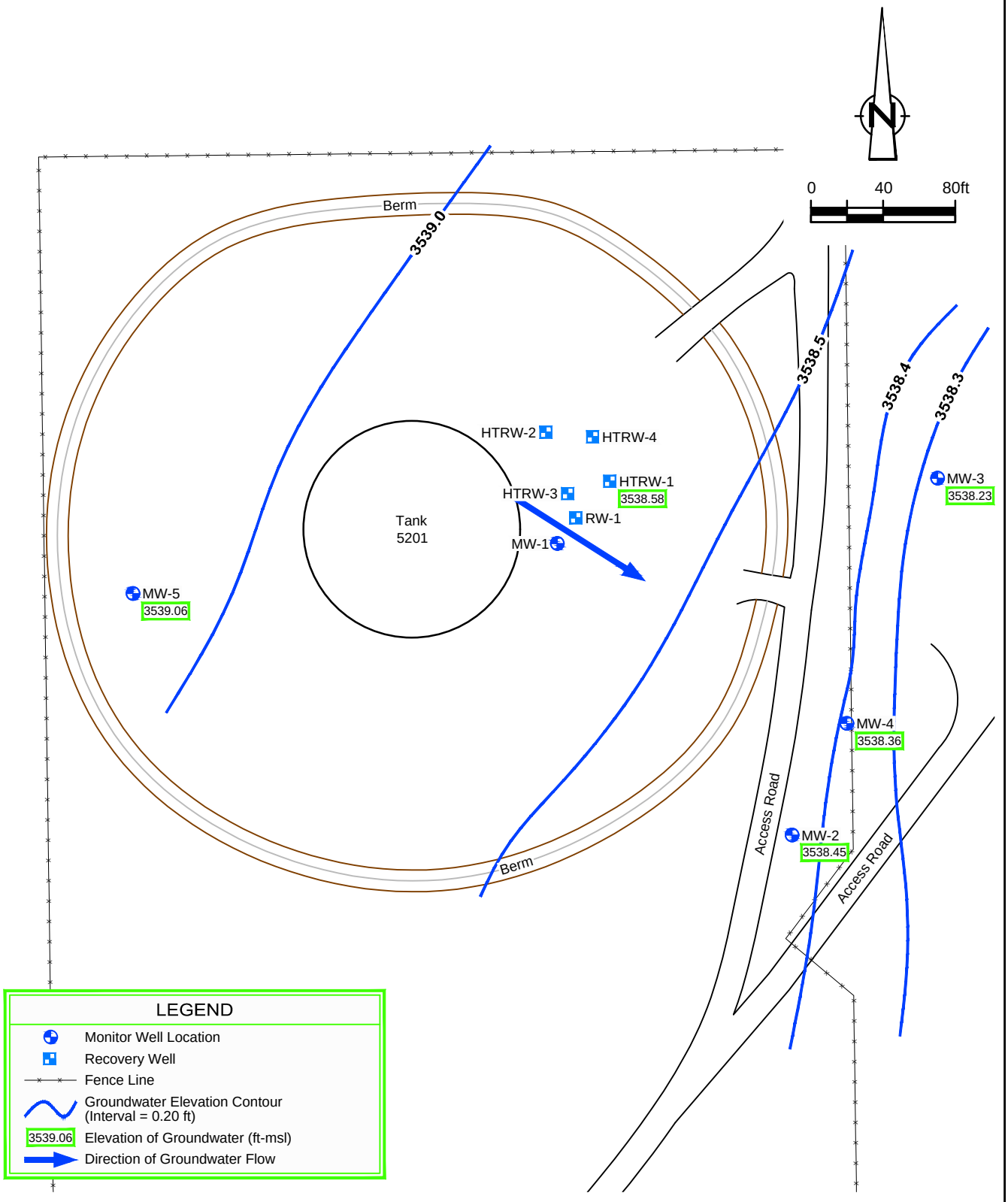

figure 7

GROUNDWATER SURFACE MAP - DECEMBER 2020
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

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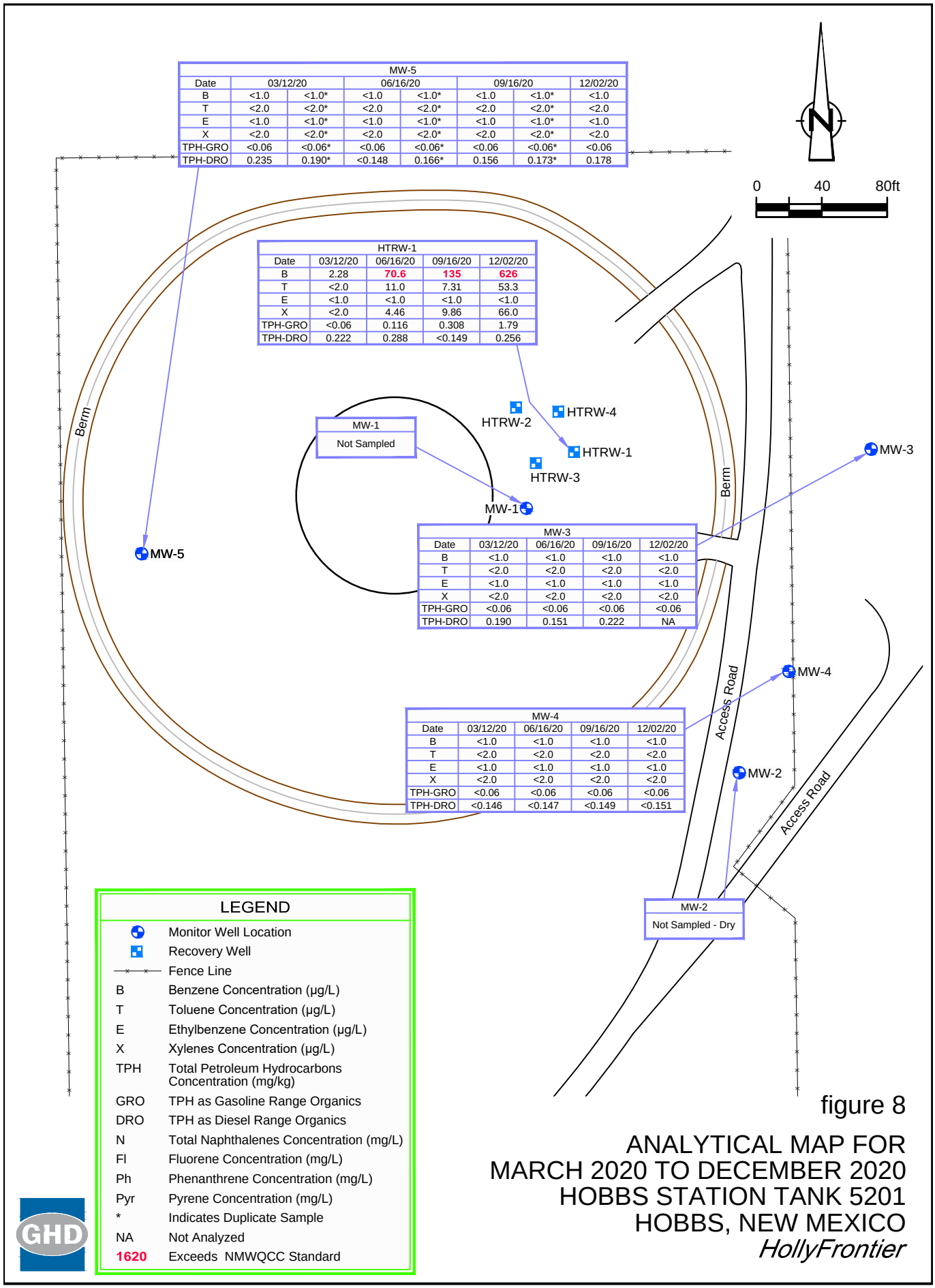


figure 8

ANALYTICAL MAP FOR MARCH 2020 TO DECEMBER 2020 HOBBS STATION TANK 5201 HOBBS, NEW MEXICO

HollyFrontier

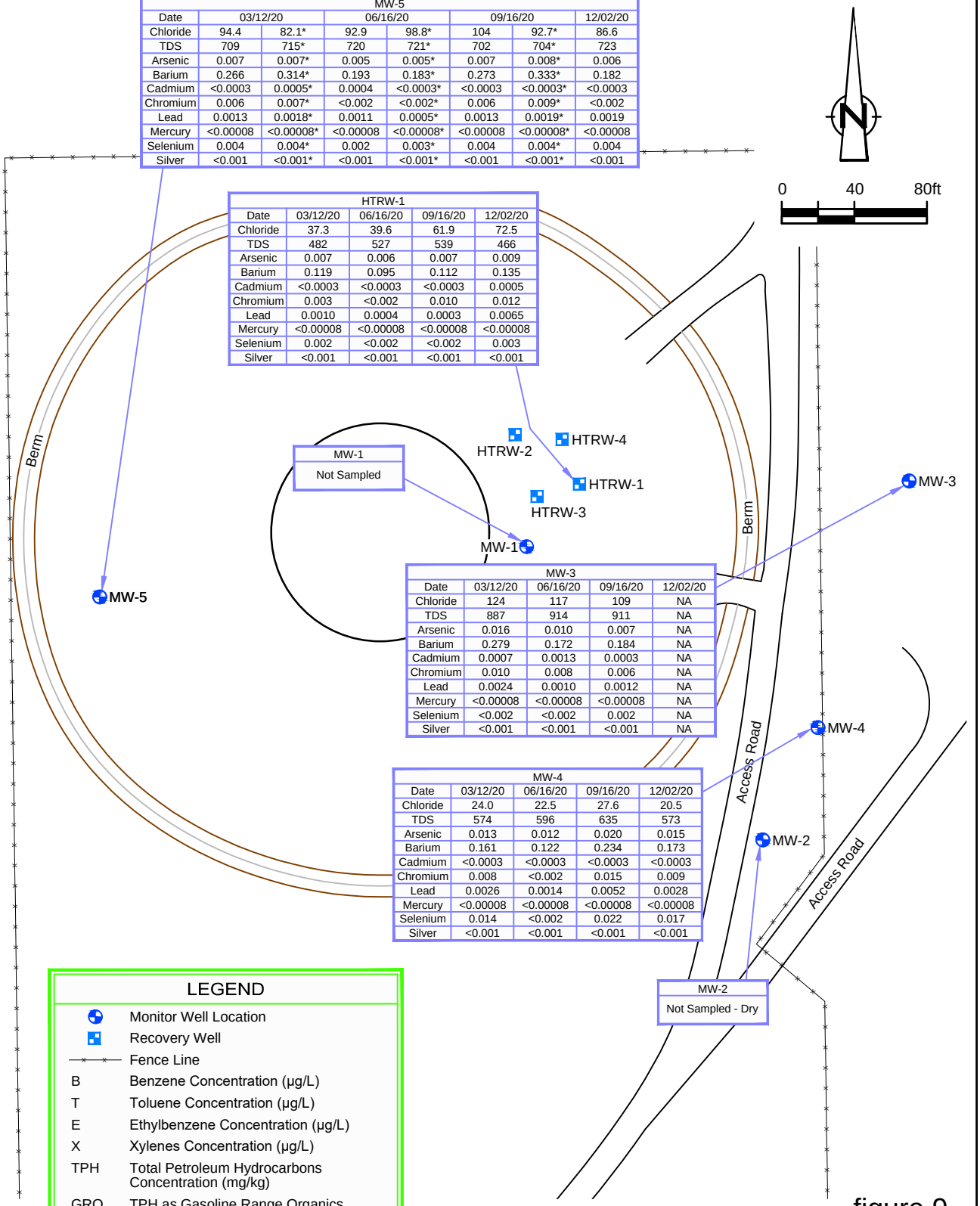
I:\CAD\Files\Eight Digit Job Numbers\1121----\11211520-HF-Hobbs Tank\11211520(GWR 2020)\11211520(GWR 2020)GN-DL001.dwg Plot Date: FEB 19, 2021

MW-5							
Date	03/12/20		06/16/20		09/16/20		12/02/20
Chloride	94.4	82.1*	92.9	98.8*	104	92.7*	86.6
TDS	709	715*	720	721*	702	704*	723
Arsenic	0.007	0.007*	0.005	0.005*	0.007	0.008*	0.006
Barium	0.266	0.314*	0.193	0.183*	0.273	0.333*	0.182
Cadmium	<0.0003	0.0005*	0.0004	<0.0003*	<0.0003	<0.0003*	<0.0003
Chromium	0.006	0.007*	<0.002	<0.002*	0.006	0.009*	<0.002
Lead	0.0013	0.0018*	0.0011	0.0005*	0.0013	0.0019*	0.0019
Mercury	<0.00008	<0.00008*	<0.00008	<0.00008*	<0.00008	<0.00008*	<0.00008
Selenium	0.004	0.004*	0.002	0.003*	0.004	0.004*	0.004
Silver	<0.001	<0.001*	<0.001	<0.001*	<0.001	<0.001*	<0.001

HTRW-1				
Date	03/12/20	06/16/20	09/16/20	12/02/20
Chloride	37.3	39.6	61.9	72.5
TDS	482	527	539	466
Arsenic	0.007	0.006	0.007	0.009
Barium	0.119	0.095	0.112	0.135
Cadmium	<0.0003	<0.0003	<0.0003	0.0005
Chromium	0.003	<0.002	0.010	0.012
Lead	0.0010	0.0004	0.0003	0.0065
Mercury	<0.00008	<0.00008	<0.00008	<0.00008
Selenium	0.002	<0.002	<0.002	0.003
Silver	<0.001	<0.001	<0.001	<0.001

MW-3				
Date	03/12/20	06/16/20	09/16/20	12/02/20
Chloride	124	117	109	NA
TDS	887	914	911	NA
Arsenic	0.016	0.010	0.007	NA
Barium	0.279	0.172	0.184	NA
Cadmium	0.0007	0.0013	0.0003	NA
Chromium	0.010	0.008	0.006	NA
Lead	0.0024	0.0010	0.0012	NA
Mercury	<0.00008	<0.00008	<0.00008	NA
Selenium	<0.002	<0.002	0.002	NA
Silver	<0.001	<0.001	<0.001	NA

MW-4				
Date	03/12/20	06/16/20	09/16/20	12/02/20
Chloride	24.0	22.5	27.6	20.5
TDS	574	596	635	573
Arsenic	0.013	0.012	0.020	0.015
Barium	0.161	0.122	0.234	0.173
Cadmium	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	0.008	<0.002	0.015	0.009
Lead	0.0026	0.0014	0.0052	0.0028
Mercury	<0.00008	<0.00008	<0.00008	<0.00008
Selenium	0.014	<0.002	0.022	0.017
Silver	<0.001	<0.001	<0.001	<0.001



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/kg)
GRO	TPH as Gasoline Range Organics
DRO	TPH as Diesel Range Organics
N	Total Naphthalenes Concentration (mg/L)
Fl	Fluorene Concentration (mg/L)
Ph	Phenanthrene Concentration (mg/L)
Pyr	Pyrene Concentration (mg/L)
*	Indicates Duplicate Sample
NA	Not Analyzed
1620	Exceeds NMWQCC Standard

figure 9

INORGANIC MAP FOR MARCH 2020 TO DECEMBER 2020 HOBBS STATION TANK 5201 HOBBS, NEW MEXICO

HollyFrontier

I:\CAD\Files\Eight Digit Job Numbers\1121----\11211520-HF-Hobbs Tank\11211520(GWR 2020)\11211520(GWR 2020)GN-DL001.dwg Plot Date: JAN 27, 2021

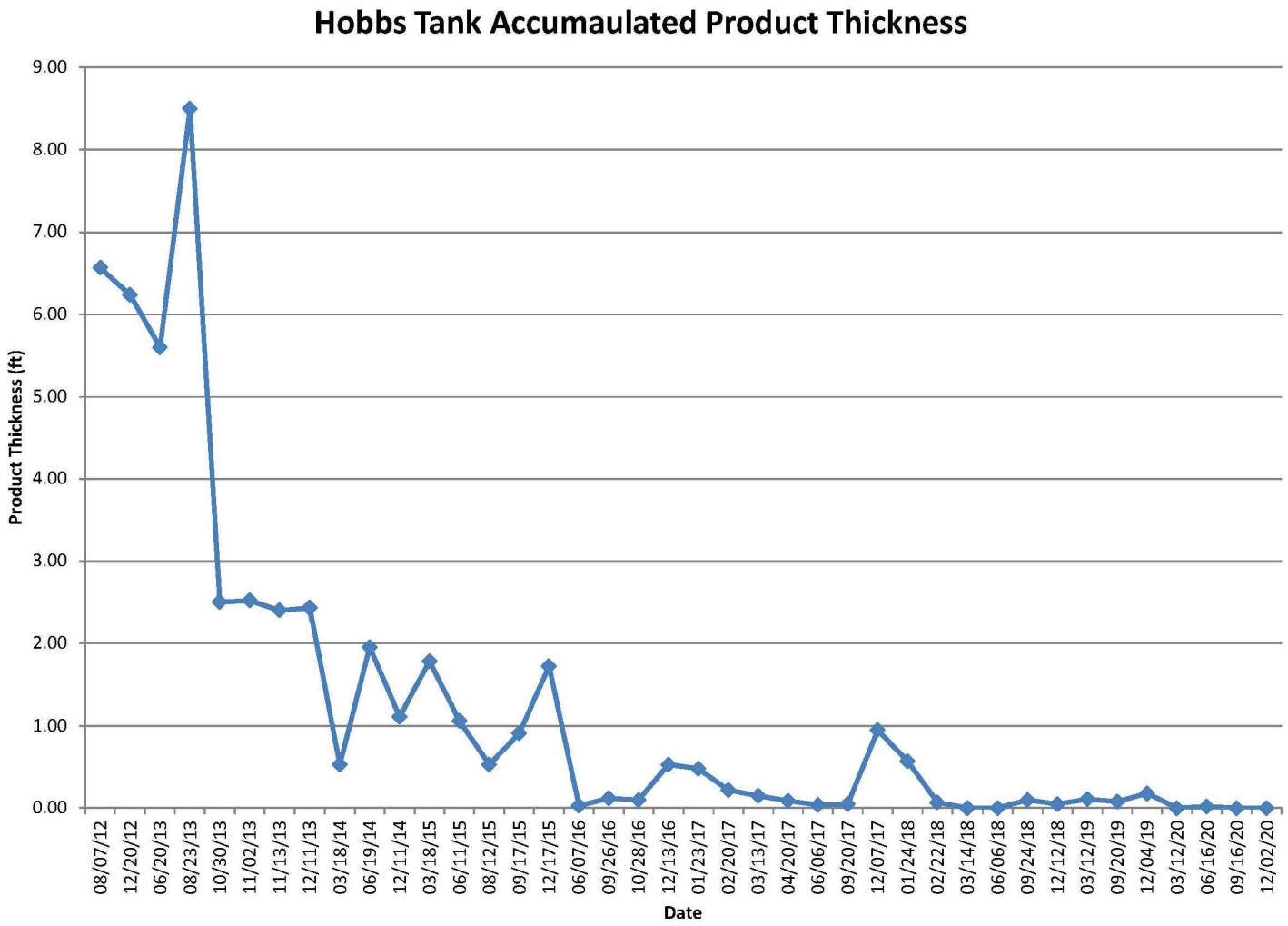


figure 10

SITE TOTAL ACCUMULATED CRUDE OIL THICKNESS
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

I:\CAD\Files\Eight Digit Job Numbers\1121----\11211520-HF-Hobbs Tank\11211520(GWR 2020)\11211520(GWR 2020)GN-DL001.dwg Plot Date: JAN 27, 2021

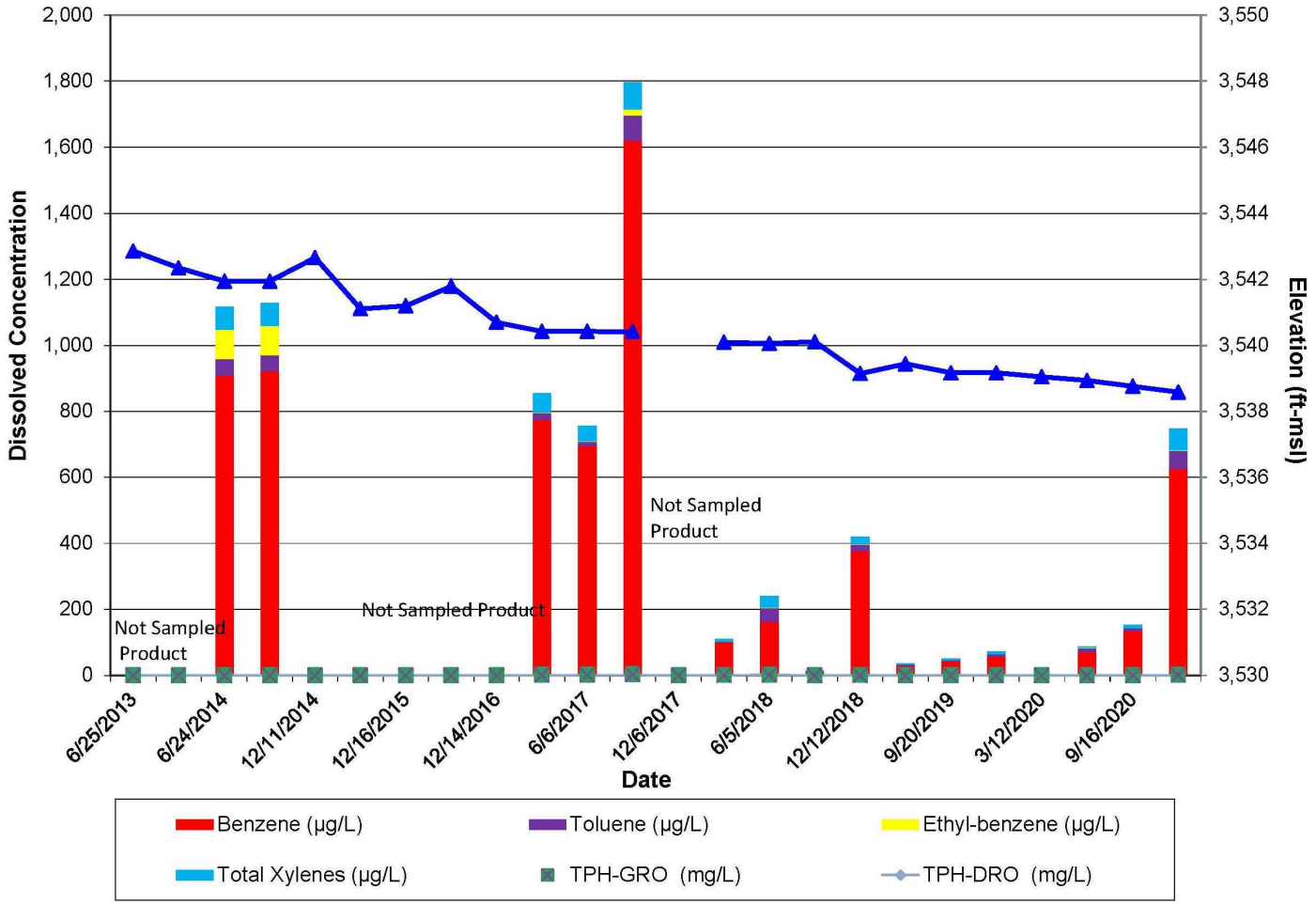


figure 11

HYDROCARBON CONCENTRATIONS FOR HTRW-1
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

I:\CAD\Files\Eight Digit Job Numbers\1121----\11211520-HF-Hobbs Tank\11211520(GWR 2020)\11211520(GWR 2020)GN-DL001.dwg Plot Date: JAN 27, 2021

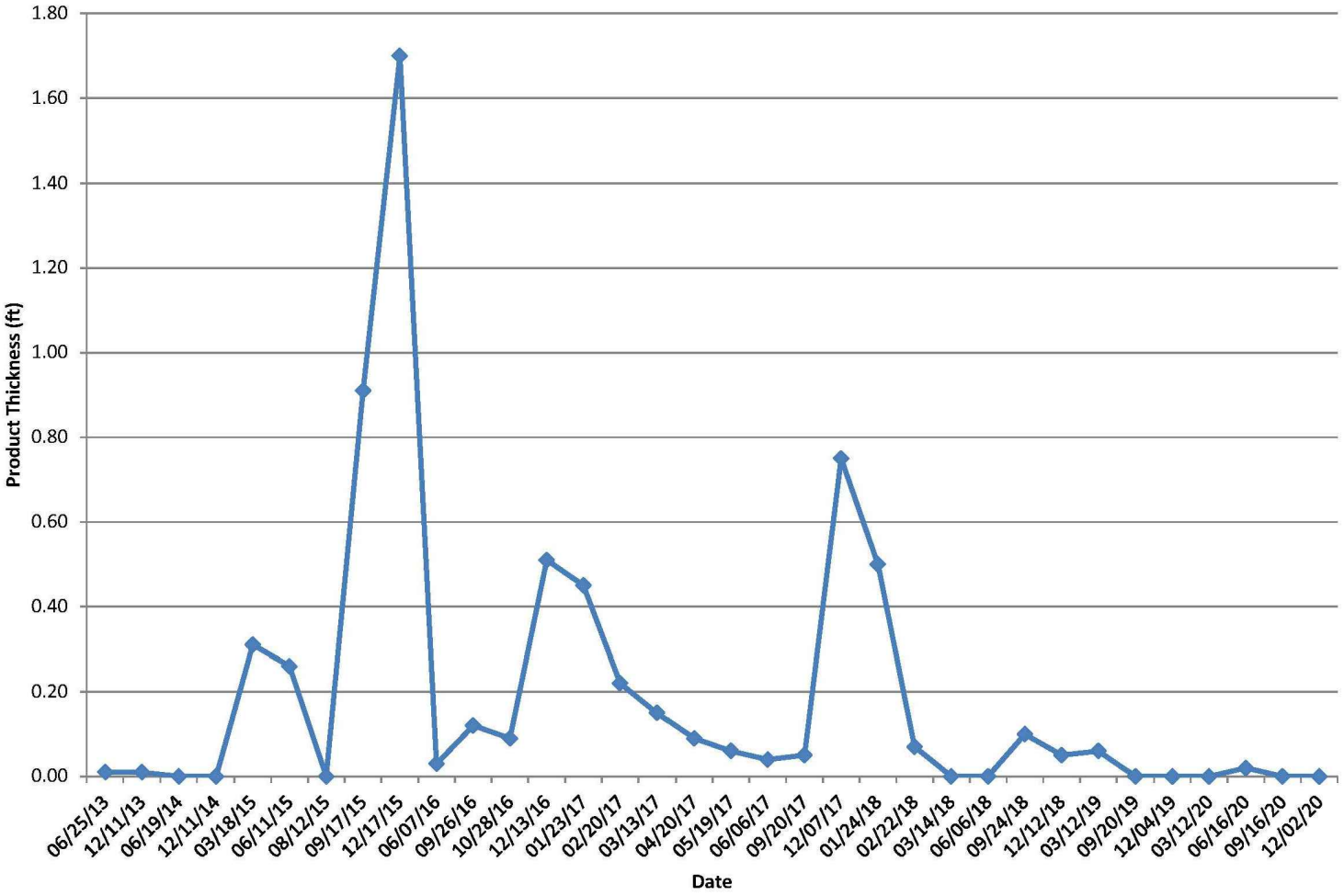


figure 12

CRUDE OIL THICKNESS FOR HTRW-3
HOBBS STATION TANK 5201
HOBBS, NEW MEXICO
HollyFrontier

I:\CAD\Files\Eight Digit Job Numbers\1121----\11211520-HF-Hobbs Tank\11211520(GWR 2020)\11211520(GWR 2020)GN-DL001.dwg Plot Date: FEB 19, 2021

Tables

Table 1 **Summary of Groundwater Hydrocarbon Results for 2019/2020**
HollyFrontier - 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)	Total Naphthalenes (mg/L)	Fluorene (mg/L)	Phenanthrene (mg/L)	Pyrene (mg/L)	Product Thickness (ft)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)
NMWQCC Groundwater Standards		**10**	**750**	**750**	**620**	**NE**	**NE**	**0.03**	**NE**	**NE**	**NE**			
MW-1	03/12/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.03	52.68	3,539.39
	09/20/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.08	53.08	3,539.03
	12/04/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.18	53.28	3,538.90
	03/12/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.07	53.17	3,538.93
	06/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.20	3,538.85
	09/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.19	3,538.86
	12/02/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.32	3,538.73
MW-2	03/12/19	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NA	NA	NA	NA	0.00	52.38	3,538.47
	09/20/19	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NA	NA	NA	NA	0.00	52.40	3,538.45
	12/04/19	<1.0	<2.0	<1.0	<2.0	<0.06	NA	NA	NA	NA	NA	0.00	51.95	3,538.90
	03/12/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NA	NA	NA	NA	0.00	52.05	3,538.80
	06/16/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NA	NA	NA	NA	0.00	52.16	3,538.69
	09/16/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NA	NA	NA	NA	0.00	52.38	3,538.47
	12/02/20	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NA	NA	NA	NA	0.00	52.40	3,538.45
MW-3	03/12/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.164	<0.0000235	<0.0000235	<0.0000235	0.0000287	0.00	51.62	3,539.19
	09/20/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.225	NA	NA	NA	NA	0.00	51.88	3,538.93
	12/04/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.203	NA	NA	NA	NA	0.00	51.98	3,538.83
	03/12/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.190	NA	NA	NA	NA	0.00	52.10	3,538.71
	06/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.151	NA	NA	NA	NA	0.00	52.20	3,538.61
	09/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.222	NA	NA	NA	NA	0.00	52.39	3,538.42
	12/02/20	<1.0	<2.0	<1.0	<2.0	<0.06	NA	NA	NA	NA	NA	0.00	52.58	3,538.23
MW-4	03/12/19	<1.0	<2.0	<1.0	<2.0	0.061	0.101	<0.0000239	<0.0000239	<0.0000239	0.000164	0.00	51.59	3539.26
	09/20/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.183	NA	NA	NA	NA	0.00	51.92	3538.93
	12/04/19	<1.0	<2.0	<1.0	<2.0	<0.06	<0.150	NA	NA	NA	NA	0.00	51.95	3538.90
	03/12/20	<1.0	<2.0	<1.0	<2.0	<0.06	<0.146	NA	NA	NA	NA	0.00	52.06	3538.79
	06/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	<0.147	NA	NA	NA	NA	0.00	52.17	3538.68
	09/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	<0.149	NA	NA	NA	NA	0.00	52.32	3538.53
	12/02/20	<1.0	<2.0	<1.0	<2.0	<0.06	<0.151	NA	NA	NA	NA	0.00	52.49	3538.36
MW-5	03/12/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.178	<0.0000236	<0.0000236	<0.0000236	<0.0000236	0.00	52.97	3,539.78
duplicate	03/12/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.157	<0.0000238	<0.0000238	<0.0000238	<0.0000238	0.00	52.97	3,539.78
	09/20/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.223	NA	NA	NA	NA	0.00	53.22	3,539.53
duplicate	09/20/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.230	NA	NA	NA	NA	0.00	53.22	3,539.53
	12/04/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.171	NA	NA	NA	NA	0.00	53.34	3,539.41
duplicate	12/04/19	<1.0	<2.0	<1.0	<2.0	<0.06	0.168	NA	NA	NA	NA	0.00	53.34	3,539.41
	03/12/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.235	NA	NA	NA	NA	0.00	53.40	3,539.35
duplicate	03/12/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.190	NA	NA	NA	NA	0.00	53.40	3,539.35
	06/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	<0.148	NA	NA	NA	NA	0.00	53.40	3,539.35
duplicate	06/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.166	NA	NA	NA	NA	0.00	53.58	3,539.17
	09/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.156	NA	NA	NA	NA	0.00	53.58	3,539.17
duplicate	09/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.173	NA	NA	NA	NA	0.00	53.69	3,539.06
	12/02/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.178	NA	NA	NA	NA	0.00	53.69	3,539.06

Table 1 **Summary of Groundwater Hydrocarbon Results for 2019/2020**
HollyFrontier - 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)	Total Naphthalenes (mg/L)	Fluorene (mg/L)	Phenanthrene (mg/L)	Pyrene (mg/L)	Product Thickness (ft)	Depth to Water (ft-bmp)	Groundwater Elevation (ft-msl)
NMWQCC Groundwater Standards		**10**	**750**	**750**	**620**	**NE**	**NE**	**0.03**	**NE**	**NE**	**NE**			
HTRW-1	03/12/19	**28.8**	2.56	<1.0	3.48	0.139	0.154	<0.0000238	<0.0000238	<0.0000238	0.0000267	0.00	48.70	3,539.44
	09/20/19	**42.4**	3.07	<1.0	3.84	0.318	0.263	NA	NA	NA	NA	0.00	48.97	3,539.17
	12/04/19	**57.5**	5.82	<1.0	8.27	0.118	<0.148	NA	NA	NA	NA	0.00	48.97	3,539.17
	03/12/20	2.28	<2.0	<1.0	<2.0	<0.06	0.222	NA	NA	NA	NA	0.00	49.09	3,539.05
	06/16/20	**70.6**	11.0	<1.0	4.46	0.116	0.288	NA	NA	NA	NA	0.00	49.20	3,538.94
	09/16/20	**135**	7.31	<1.0	9.86	0.308	<0.149	NA	NA	NA	NA	0.00	49.38	3,538.76
	12/02/20	**626**	53.3	<1.0	66.0	1.79	0.256	NA	NA	NA	NA	0.00	49.56	3,538.58
HTRW-2	03/12/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.01	3539.50
	09/20/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.28	3539.23
	12/04/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.35	3539.16
	03/12/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.47	3539.04
	06/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.59	3538.92
	09/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.68	3538.83
	12/02/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	48.89	3538.62
HTRW-3	03/12/19	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	0.06	49.35	3,539.44
	09/20/19	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	0.00	49.60	3,539.15
	12/04/19	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	0.00	49.75	3,539.00
	03/12/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.89	3,538.86
	06/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.02	49.92	3,538.84
	09/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	50.08	3,538.67
	12/02/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	50.24	3,538.51
HTRW-4	03/12/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.05	3539.52
	09/20/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.38	3539.19
	12/04/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.92	3538.65
	03/12/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.55	3539.02
	06/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.68	3538.89
	09/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	49.82	3538.75
	12/02/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	50.01	3538.56
RW-1	03/12/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.02	52.66	3536.44
	09/20/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	52.95	3536.14
	12/04/19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.10	3535.99
	03/12/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.19	3535.90
	06/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.30	3535.79
	09/16/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.43	3535.66
	12/02/20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.00	53.76	3535.33

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 Inorganic Results
HollyFrontier - Hobbs Tank 5201 - Lea County, New Mexico

Sample ID	Date Sampled	Chloride	TDS	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
NMWQCC Groundwater Standards		**250**	**1000**	**0.1**	**1**	**0.01**	**0.05**	**0.05**	**0.002**	**0.05**	**0.05**
MW-2	6/25/2014	30.6	729	0.021	0.447	<0.001	<0.006	0.0003	<0.0002	<0.006	<0.002
	12/14/2016	91.1	899	0.024	0.574	<0.0003	0.006	0.0006	<0.00008	<0.002	<0.001
	6/6/2017	NA	NA	0.027	0.627	<0.0003	0.027	0.0075	<0.00008	<0.002	<0.001
	9/19/2017	93.1	910	0.027	0.594	<0.0003	0.023	0.0040	<0.00008	<0.002	<0.001
	12/6/2017	15.6	**1440**	0.022	0.258	<0.0003	0.009	0.0114	<0.00008	0.010	<0.001
	3/12/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/20/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/12/2020	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry
	6/16/2020	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry
	9/16/2020	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry
	12/2/2020	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry	NS-dry
MW-3	12/14/2016	105	714	0.004	0.092	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
	6/6/2017	NA	NA	0.005	0.155	0.0003	0.029	0.0029	<0.00008	<0.002	<0.001
	9/19/2017	104	793	0.003	0.110	<0.0003	0.002	0.0003	<0.00008	<0.002	<0.001
	12/6/2017	106	782	0.021	0.160	<0.0003	0.005	0.0008	<0.00008	<0.002	<0.001
	3/12/2019	125	840	0.022	0.222	<0.0003	0.007	0.0016	<0.00008	<0.002	<0.001
	9/20/2019	NA	NA	0.027	0.251	0.0005	0.009	0.0020	<0.00008	<0.002	<0.001
	12/4/2019	117	907	0.011	0.157	0.0003	<0.002	0.0013	0.00009	<0.002	<0.001
	3/12/2020	124	887	0.016	0.279	0.0007	0.010	0.0024	<0.00008	<0.002	<0.001
	6/16/2020	117	914	0.010	0.172	0.0013	0.008	0.0010	<0.00008	<0.002	<0.001
	9/16/2020	109	911	0.007	0.184	0.0003	0.006	0.0012	<0.00008	0.002	<0.001
	12/2/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/14/2016	22.0	**1960**	0.059	0.990	<0.0003	0.026	0.0140	<0.00008	**0.069**	<0.001
duplicate	12/14/2016	23.7	**1910**	0.055	0.769	<0.0003	0.021	0.0114	<0.00008	**0.054**	<0.001
	6/6/2017	NA	NA	0.010	0.080	<0.0003	<0.002	<0.0003	<0.00008	0.002	<0.001
	9/19/2017	22.3	**1360**	0.016	0.160	<0.0003	0.005	0.0018	<0.00008	0.006	<0.001
	12/6/2017	90.6	958	0.023	0.560	0.0006	0.034	0.0480	<0.00008	<0.002	<0.001
	3/12/2019	17.4	577	0.041	0.464	<0.0003	0.032	0.0114	<0.00008	**0.066**	<0.001
	9/20/2019	NA	NA	0.013	0.143	<0.0003	0.005	0.0016	<0.00008	0.007	<0.001
	12/4/2019	19.0	566	0.012	0.121	<0.0003	<0.002	0.0013	<0.00008	<0.002	<0.001
	3/12/2020	24.0	574	0.013	0.161	<0.0003	0.008	0.0026	<0.00008	0.014	<0.001
	6/16/2020	22.5	596	0.012	0.122	<0.0003	<0.002	0.0014	<0.00008	<0.002	<0.001
	9/16/2020	27.6	635	0.020	0.234	<0.0003	0.015	0.0052	<0.00008	0.022	<0.001
	12/2/2020	20.5	573	0.015	0.173	<0.0003	0.009	0.0028	<0.00008	0.017	<0.001
MW-5	6/25/2014	44.9	545	0.007	0.132	<0.001	0.003	0.0003	<0.0002	0.004	<0.002
	12/14/2016	50.2	607	0.007	0.127	<0.0003	0.004	0.0003	<0.00008	0.004	<0.001
	6/6/2017	NA	NA	0.005	0.122	<0.0003	<0.002	<0.00008	<0.00008	0.003	<0.001
	9/19/2017	53.0	625	0.006	0.165	<0.0003	0.005	0.0013	<0.00008	0.004	<0.001
	12/6/2017	58.5	643	0.007	0.261	<0.0003	0.011	0.0017	<0.00008	0.003	<0.001
duplicate	12/6/2017	56.5	649	0.007	0.218	0.0003	0.008	0.0019	<0.00008	0.004	<0.001
	3/12/2019	81.2	694	0.011	0.284	<0.0003	0.009	0.0022	<0.00008	0.005	<0.001
duplicate	3/12/2019	83.8	709	0.008	0.306	0.0004	0.010	0.0021	<0.00008	0.004	<0.001
	9/20/2019	NA	NA	0.006	0.262	<0.0003	0.005	0.0011	<0.00008	0.004	<0.001
duplicate	9/20/2019	NA	NA	0.005	0.214	<0.0003	0.002	0.0006	<0.00008	0.003	<0.001
	12/4/2019	77.5	707	0.006	0.177	0.0004	<0.002	0.0012	<0.00008	0.003	<0.001
duplicate	12/4/2019	78.6	723	0.006	0.171	<0.0003	<0.002	0.0010	<0.00008	0.003	<0.001
	3/12/2020	94.4	709	0.007	0.266	<0.0003	0.006	0.0013	<0.00008	0.004	<0.001
duplicate	3/12/2020	82.1	715	0.007	0.314	0.0005	0.007	0.0018	<0.00008	0.004	<0.001
	6/16/2020	92.9	720	0.005	0.193	0.0004	<0.002	0.0011	<0.00008	0.002	<0.001
duplicate	6/16/2020	98.8	721	0.005	0.183	<0.0003	<0.002	0.0005	<0.00008	0.003	<0.001
	9/16/2020	104	702	0.007	0.273	<0.0003	0.006	0.0013	<0.00008	0.004	<0.001
duplicate	9/16/2020	92.7	704	0.008	0.333	<0.0003	0.009	0.0019	<0.00008	0.004	<0.001
	12/2/2020	86.6	723	0.006	0.182	<0.0003	<0.002	0.0019	<0.00008	0.004	<0.001

Table 2 Summary of Groundwater Inorganic Results
HollyFrontier - Hobbs Tank 5201 - Lea County, New Mexico

Sample ID	Date Sampled	Chloride	TDS	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
NMWQCC Groundwater Standards		**250**	**1000**	**0.1**	**1**	**0.01**	**0.05**	**0.05**	**0.002**	**0.05**	**0.05**
HTRW-1	12/14/2016	121	667	0.005	0.160	<0.0003	0.003	0.0003	<0.00008	<0.002	<0.001
	6/6/2017	NA	NA	0.004	0.134	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
duplicate	6/6/2017	NA	NA	0.004	0.138	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
	9/19/2017	47.4	597	0.005	0.138	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
	3/12/2019	21.3	501	0.007	0.125	<0.0003	<0.002	0.0007	<0.00008	<0.002	<0.001
	9/20/2019	NA	NA	0.006	0.094	<0.0003	<0.002	0.0004	<0.00008	<0.002	<0.001
	12/4/2019	26.8	480	0.008	0.106	<0.0003	<0.002	0.0010	<0.00008	<0.002	<0.001
	3/12/2020	37.3	482	0.007	0.119	<0.0003	0.003	0.0010	<0.00008	0.002	<0.001
	6/16/2020	39.6	527	0.006	0.095	<0.0003	<0.002	0.0004	<0.00008	<0.002	<0.001
	9/16/2020	61.9	539	0.007	0.112	<0.0003	0.010	0.0003	<0.00008	<0.002	<0.001
	12/2/2020	72.5	466	0.009	0.135	0.0005	0.012	0.0065	<0.00008	0.003	<0.001
HTRW-2	12/14/2016	91.0	675	0.008	0.310	<0.0003	0.003	0.0004	<0.00008	<0.002	<0.001
	6/6/2017	NA	NA	0.007	0.326	<0.0003	<0.002	0.0003	<0.00008	<0.002	<0.001
HTRW-3	12/14/2016	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP
	6/6/2017	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP	NSP
HTRW-4	12/14/2016	102	**1420**	0.038	0.242	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001
	6/6/2017	NA	NA	0.014	0.330	<0.0003	<0.002	<0.0003	<0.00008	<0.002	<0.001

NOTES:
mg/L = milligrams per liter
< = analyte not detected above indicated value
BOLD = Exceeds NMWQCC Groundwater Cleanup Level
NA - Not Analyzed
TDS = Total Disolved Solids
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

Table 3 Summary of Groundwater QA/QC Results for March 2020 to December 2020
HollyFrontier - Hobbs Tank 5201 - Lea County, New Mexico

		Laboratory Analytical Results															
Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Chloride (mg/L)	TDS (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
NMWQC Groundwater Standards		**10**	**750**	**750**	**620**	**NE**	**NE**	**250**	**1000**	**0.1**	**1**	**0.01**	**0.05**	**0.05**	**0.002**	**0.05**	**0.05**
MW-5	03/12/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.235	94.4	709	0.007	0.266	<0.0003	0.006	0.0013	<0.00008	0.004	<0.001
	03/12/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.190	82.1	715	0.007	0.314	0.0005	0.007	0.0018	<0.00008	0.004	<0.001
MW-5	06/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	<0.148	92.9	720	0.005	0.193	0.0004	<0.002	0.0011	<0.00008	0.002	<0.001
	06/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.166	98.8	721	0.005	0.183	<0.0003	<0.002	0.0005	<0.00008	0.003	<0.001
MW-5	09/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.156	104	702	0.007	0.273	<0.0003	0.00591	0.0013	<0.00008	0.004	<0.001
	09/16/20	<1.0	<2.0	<1.0	<2.0	<0.06	0.173	92.7	704	0.008	0.333	<0.0003	0.00883	0.0019	<0.00008	0.004	<0.001
Trip Blank	03/12/20	<1.0	<2.0	<1.0	<1.0	<0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trip Blank	06/16/20	<1.0	<2.0	<1.0	<1.0	<0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trip Blank	09/16/20	<1.0	<2.0	<1.0	<1.0	<0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trip Blank	12/02/20	<1.0	<2.0	<1.0	<1.0	<0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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
HollyFrontier- Hobbs Tank 5201 - Lea County, New Mexico

Well ID/MP Elevation	Date	DTP	DTW	Prod. Thick	TD	Groundwater Elevation	Corrected Groundwater Elevation[1]	Totalizer
		(ft-bmp)	(ft-bmp)	(ft)	(ft-bmp)	(ft-msl)	(ft-msl)	(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	
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	

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

Well ID/MP Elevation	Date	DTP	DTW	Prod. Thick	TD	Groundwater Elevation	Corrected Groundwater Elevation[1]	Totalizer
		(ft-bmp)	(ft-bmp)	(ft)	(ft-bmp)	(ft-msl)	(ft-msl)	(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		
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		
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		

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

Well ID/MP Elevation	Date	DTP	DTW	Prod. Thick	TD	Groundwater Elevation	Corrected Groundwater Elevation[1]	Totalizer
		(ft-bmp)	(ft-bmp)	(ft)	(ft-bmp)	(ft-msl)	(ft-msl)	(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		
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	
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		

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

Well ID/MP Elevation	Date	DTP	DTW	Prod. Thick	TD	Groundwater Elevation	Corrected Groundwater Elevation[1]	Totalizer
		(ft-bmp)	(ft-bmp)	(ft)	(ft-bmp)	(ft-msl)	(ft-msl)	(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	0.01		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	
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		

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 and Field Parameters

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HollyFrontier - 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		10	750	750	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	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	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	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	NS-Dry	0.00	52.40	3,538.45	NS-Dry	NS-Dry	NS-Dry	NS-Dry	NS-Dry

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters

HollyFrontier - 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		10	750	750	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

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HollyFrontier - 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		10	750	750	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

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters

HollyFrontier - 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		10	750	750	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	7.03	112.0

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HollyFrontier - 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		10	750	750	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			18.9	1.001	2.01	6.92	33.2
	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
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

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters
HollyFrontier - 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		10	750	750	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	0.01	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

Appendix B Summary of Historical Groundwater Analytical Results and Field Parameters

HollyFrontier - 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		10	750	750	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

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
Groundwater Laboratory Reports (on disk)

March 25, 2020

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

Order No.: 2003111

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 7 sample(s) on 3/13/2020 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: T104704211-19-24

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

№ 81193

CHAIN-OF-CUSTODY

CLIENT: GHD
ADDRESS: 14968 West Ft 800
PHONE: 3039416156 FAX/E-MAIL: BRAD.STEPHENSON@GHD.COM
DATA REPORTED TO: BSTEPHENSON
ADDITIONAL REPORT COPIES TO: J Cloud

DATE: 3/12/2020 PAGE 1 OF 1
PO #: DHL WORK ORDER #: 200311
PROJECT LOCATION OR NAME: HOBBS TANK
CLENT PROJECT #: 078863 COLLECTOR: BStephenson

Authorize 5% surcharge for TRRP Report? ❑ Yes ❑ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ❑ NaOH ❑	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
MW-2						0						X X X X X	delete DRY
MW-3	01	3/12/2020	0930	W		10						X X X X X	
MW-4	02		1015	W		10						X X X X X	
MW-5	03		1040	W		10						X X X X X	
MW-5D	04		1040	W		10						X X X X X	
HTRW-1	05	↓	1140	W		10						X X X X X	
Trip 1	06	3/12/2020		W		4						X X	
Trip 2	07	↓				4						GHD	

ANALYSES: BTEX ❑ MTBE ❑ TPH 1005 ❑ TPH 1006 ❑ [METHOD 8021] ❑ HOLD 1006 ❑ GRO [METHOD 8015] ❑ DRO [METHOD 8105] ❑ VOC 8260 ❑ VOC 624 ❑ VOC 8260/5035 ❑ SVOC 8270 ❑ PAH 8270 ❑ HOLD PAH ❑ SVOC 625 ❑ 8270 PEST ❑ 625 PEST/PCB ❑ 608 PCB ❑ 8270 O-P PEST ❑ 8082 PCB ❑ 8270 PCB ❑ 8321 HERB ❑ T PHOS, AMMONIA ❑ METALS 6020 ❑ METALS 200.8 ❑ DISS. METALS ❑ ____ ❑ RCRA ❑ TX11 ❑ ____ PH ❑ HEX CHROM ❑ ALKALINITY ❑ COD ❑ CHLORIDE ❑ ANIONS ____ ❑ TCLP SVOC ❑ VOC ❑ PEST ❑ HERB ❑ TCLP METALS ❑ RCRA 8 ❑ TX-11 ❑ Pb ❑ RCI ❑ FLASHPOINT ❑ DGAS ❑ TDS ❑ TSS ❑ % MOISTURE ❑ CYANIDE ❑

RELINQUISHED BY: (Signature) DATE/TIME 3/12/2020 1600 RECEIVED BY: (Signature) TO FEDEX
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
FedEX 3.13.20 0930
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

❑ DHL DISPOSAL @ $5.00 each ❑ Return 3

TURN AROUND TIME
RUSH ❑ CALL FIRST
1 DAY ❑ CALL FIRST
2 DAY ❑
NORMAL ❑
OTHER ❑ ____

LABORATORY USE ONLY:
RECEIVING TEMP: 3.4 / 4.7 THERM #: 78
CUSTODY SEALS: ❑ BROKEN ❑ INTACT ☒ NOT USED
CARRIER: ❑ LONE STAR ☒ FEDEX ❑ UPS ❑ OTHER
❑ COURIER DELIVERY
❑ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

ORIGIN ID:HOBA (303) 941-6156
GHD
14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 12MAR20
ACTWGT: 38.50 LB
CAD: 6994246/SSFE2021
DIMS: 21x14x14 IN

BILL THIRD PARTY

Part # 156297-435 RRDB2 EXP 04/
56BJ2/64E0/FE44

0 **DHL ANALYTICAL**
DHL ANALYTICAL
2300 DOUBLE CREEK DR

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

FedEx
Express

E

J201020011

1 of 2
TRK# 0201 **3910 7128 1520**
MASTER

FRI - 13 MAR 10:30A
PRIORITY OVERNIGHT

A8 BSMA

78664
TX-US AUS

3.4

ORIGIN ID:HOBA (303) 941-6156
GHD
14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 12MAR20
ACTWGT: 41.60 LB
CAD: 6994246/SSFE2021
DIMS: 21x14x14 IN

BILL THIRD PARTY

Part # 156297-435 RRDB2 F
J12/64E0/FE4A

TO **DHL ANALYTICAL**
DHL ANALYTICAL
2300 DOUBLE CREEK DR

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

FedEx Express

E

J201020011301uv

03.13
1531
D
10:30
1

512
RT
FZ

2 of 2
MPS# 0263 **3910 7128 1531**
Mstr# 3910 7128 1520 0201

FRI - 13 MAR 10:30A
PRIORITY OVERNIGHT

A8 BSMA

78664
TX-US **AUS**

4/7

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 3/13/2020

Work Order Number 2003111 Received by: JH

Checklist completed by: _____ 3/13/2020 Reviewed by _____ 3/13/2020
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping 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 ☐	3.4 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? no		Checked by EL
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:** *25-Mar-20*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2003111

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, EPA and Standard Methods.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For DRO Analysis, the recovery of surrogate Octacosane for Sample HTRW-1 was marginally above the method control limits. Additionally, the recovery of surrogate Isopropylbenzene for Method Blank-95462 was below the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary Report. The remaining surrogate for these samples was within method control limits. No further corrective action was taken.

For Anions Analysis, the recovery of Chloride for the Matrix Spike (2003111-01 MS) was below the method control limits. This is flagged accordingly in the QC Summary Report. This anion was within method control limits in the associated LCS/MSD. No further corrective action was taken.

DHL Analytical, Inc.

Date: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	MW-3
Project:	Hobbs Tank	**Lab ID:**	2003111-01
Project No:	078863	**Collection Date:**	03/12/20 09:30 AM
Lab Order:	2003111	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.190	0.147	0.184		mg/L	1	03/22/20 10:25 AM
Surr: Isopropylbenzene	87.6	0	47-142		%REC	1	03/22/20 10:25 AM
Surr: Octacosane	90.9	0	51-124		%REC	1	03/22/20 10:25 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/20/20 04:04 PM
Surr: Tetrachlorethene	124	0	74-138		%REC	1	03/20/20 04:04 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.0164	0.00200	0.00500		mg/L	1	03/17/20 12:01 PM
Barium	0.279	0.00300	0.0100		mg/L	1	03/17/20 12:01 PM
Cadmium	0.000665	0.000300	0.00100	J	mg/L	1	03/17/20 12:01 PM
Chromium	0.0103	0.00200	0.00500		mg/L	1	03/17/20 12:01 PM
Lead	0.00240	0.000300	0.00100		mg/L	1	03/17/20 12:01 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/17/20 12:01 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	03/17/20 12:01 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/16/20 12:23 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 03:53 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 03:53 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 03:53 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 03:53 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 03:53 PM
Surr: 1,2-Dichloroethane-d4	98.2	0	72-119		%REC	1	03/16/20 03:53 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	03/16/20 03:53 PM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	03/16/20 03:53 PM
Surr: Toluene-d8	105	0	81-120		%REC	1	03/16/20 03:53 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	124	3.00	10.0		mg/L	10	03/17/20 05:34 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	887	10.0	10.0		mg/L	1	03/16/20 04:45 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: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	MW-4
Project:	Hobbs Tank	**Lab ID:**	2003111-02
Project No:	078863	**Collection Date:**	03/12/20 10:15 AM
Lab Order:	2003111	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.146	0.146	0.183		mg/L	1	03/22/20 10:34 AM
Surr: Isopropylbenzene	85.9	0	47-142		%REC	1	03/22/20 10:34 AM
Surr: Octacosane	83.7	0	51-124		%REC	1	03/22/20 10:34 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/20/20 02:08 PM
Surr: Tetrachlorethene	125	0	74-138		%REC	1	03/20/20 02:08 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.0126	0.00200	0.00500		mg/L	1	03/17/20 12:03 PM
Barium	0.161	0.00300	0.0100		mg/L	1	03/17/20 12:03 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/17/20 12:03 PM
Chromium	0.00788	0.00200	0.00500		mg/L	1	03/17/20 12:03 PM
Lead	0.00264	0.000300	0.00100		mg/L	1	03/17/20 12:03 PM
Selenium	0.0135	0.00200	0.00500		mg/L	1	03/17/20 12:03 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	03/17/20 12:03 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/16/20 12:26 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 04:18 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 04:18 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 04:18 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 04:18 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 04:18 PM
Surr: 1,2-Dichloroethane-d4	98.2	0	72-119		%REC	1	03/16/20 04:18 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	03/16/20 04:18 PM
Surr: Dibromofluoromethane	102	0	85-115		%REC	1	03/16/20 04:18 PM
Surr: Toluene-d8	102	0	81-120		%REC	1	03/16/20 04:18 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	24.0	3.00	10.0		mg/L	10	03/17/20 06:24 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	574	10.0	10.0		mg/L	1	03/16/20 04:45 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: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5
Project:	Hobbs Tank	**Lab ID:**	2003111-03
Project No:	078863	**Collection Date:**	03/12/20 10:40 AM
Lab Order:	2003111	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.235	0.147	0.184		mg/L	1	03/22/20 10:43 AM
Surr: Isopropylbenzene	63.8	0	47-142		%REC	1	03/22/20 10:43 AM
Surr: Octacosane	87.7	0	51-124		%REC	1	03/22/20 10:43 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/20/20 02:31 PM
Surr: Tetrachlorethene	123	0	74-138		%REC	1	03/20/20 02:31 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00664	0.00200	0.00500		mg/L	1	03/17/20 12:05 PM
Barium	0.266	0.00300	0.0100		mg/L	1	03/17/20 12:05 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/17/20 12:05 PM
Chromium	0.00603	0.00200	0.00500		mg/L	1	03/17/20 12:05 PM
Lead	0.00129	0.000300	0.00100		mg/L	1	03/17/20 12:05 PM
Selenium	0.00358	0.00200	0.00500	J	mg/L	1	03/17/20 12:05 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	03/17/20 12:05 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/16/20 12:28 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 04:43 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 04:43 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 04:43 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 04:43 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 04:43 PM
Surr: 1,2-Dichloroethane-d4	98.7	0	72-119		%REC	1	03/16/20 04:43 PM
Surr: 4-Bromofluorobenzene	104	0	76-119		%REC	1	03/16/20 04:43 PM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	03/16/20 04:43 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	03/16/20 04:43 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	94.4	3.00	10.0		mg/L	10	03/17/20 06:40 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	709	10.0	10.0		mg/L	1	03/16/20 04:45 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: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5D
Project:	Hobbs Tank	**Lab ID:**	2003111-04
Project No:	078863	**Collection Date:**	03/12/20 10:40 AM
Lab Order:	2003111	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.190	0.147	0.183		mg/L	1	03/22/20 10:52 AM
Surr: Isopropylbenzene	81.2	0	47-142		%REC	1	03/22/20 10:52 AM
Surr: Octacosane	95.9	0	51-124		%REC	1	03/22/20 10:52 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/20/20 02:53 PM
Surr: Tetrachlorethene	112	0	74-138		%REC	1	03/20/20 02:53 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00659	0.00200	0.00500		mg/L	1	03/17/20 12:07 PM
Barium	0.314	0.00300	0.0100		mg/L	1	03/17/20 12:07 PM
Cadmium	0.000481	0.000300	0.00100	J	mg/L	1	03/17/20 12:07 PM
Chromium	0.00727	0.00200	0.00500		mg/L	1	03/17/20 12:07 PM
Lead	0.00176	0.000300	0.00100		mg/L	1	03/17/20 12:07 PM
Selenium	0.00385	0.00200	0.00500	J	mg/L	1	03/17/20 12:07 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	03/17/20 12:07 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/16/20 12:30 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 05:07 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 05:07 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 05:07 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 05:07 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 05:07 PM
Surr: 1,2-Dichloroethane-d4	98.8	0	72-119		%REC	1	03/16/20 05:07 PM
Surr: 4-Bromofluorobenzene	105	0	76-119		%REC	1	03/16/20 05:07 PM
Surr: Dibromofluoromethane	100	0	85-115		%REC	1	03/16/20 05:07 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	03/16/20 05:07 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	82.1	3.00	10.0		mg/L	10	03/17/20 06:56 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	715	10.0	10.0		mg/L	1	03/16/20 04:45 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: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2003111-05
Project No:	078863	**Collection Date:**	03/12/20 11:40 AM
Lab Order:	2003111	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.222	0.148	0.185		mg/L	1	03/22/20 11:01 AM
Surr: Isopropylbenzene	82.6	0	47-142		%REC	1	03/22/20 11:01 AM
Surr: Octacosane	125	0	51-124	S	%REC	1	03/22/20 11:01 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/20/20 03:17 PM
Surr: Tetrachlorethene	125	0	74-138		%REC	1	03/20/20 03:17 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00705	0.00200	0.00500		mg/L	1	03/17/20 12:09 PM
Barium	0.119	0.00300	0.0100		mg/L	1	03/17/20 12:09 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/17/20 12:09 PM
Chromium	0.00308	0.00200	0.00500	J	mg/L	1	03/17/20 12:09 PM
Lead	0.00103	0.000300	0.00100		mg/L	1	03/17/20 12:09 PM
Selenium	0.00247	0.00200	0.00500	J	mg/L	1	03/17/20 12:09 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	03/17/20 12:09 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/16/20 12:33 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	0.00228	0.000300	0.00100		mg/L	1	03/16/20 05:32 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 05:32 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 05:32 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 05:32 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 05:32 PM
Surr: 1,2-Dichloroethane-d4	98.7	0	72-119		%REC	1	03/16/20 05:32 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	03/16/20 05:32 PM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	03/16/20 05:32 PM
Surr: Toluene-d8	104	0	81-120		%REC	1	03/16/20 05:32 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	37.3	3.00	10.0		mg/L	10	03/17/20 07:12 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	482	10.0	10.0		mg/L	1	03/16/20 04:45 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: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	Trip 1
Project:	Hobbs Tank	**Lab ID:**	2003111-06
Project No:	078863	**Collection Date:**	03/12/20
Lab Order:	2003111	**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	03/20/20 12:35 PM
Surr: Tetrachlorethene	126	0	74-138		%REC	1	03/20/20 12:35 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 02:14 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 02:14 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 02:14 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 02:14 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 02:14 PM
Surr: 1,2-Dichloroethane-d4	97.2	0	72-119		%REC	1	03/16/20 02:14 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	03/16/20 02:14 PM
Surr: Dibromofluoromethane	99.9	0	85-115		%REC	1	03/16/20 02:14 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	03/16/20 02:14 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: *25-Mar-20*

CLIENT:	GHD	**Client Sample ID:**	Trip 2
Project:	Hobbs Tank	**Lab ID:**	2003111-07
Project No:	078863	**Collection Date:**	03/12/20
Lab Order:	2003111	**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	03/20/20 12:59 PM
Surr: Tetrachlorethene	126	0	74-138		%REC	1	03/20/20 12:59 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 02:39 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 02:39 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 02:39 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/16/20 02:39 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/16/20 02:39 PM
Surr: 1,2-Dichloroethane-d4	99.0	0	72-119		%REC	1	03/16/20 02:39 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	03/16/20 02:39 PM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	03/16/20 02:39 PM
Surr: Toluene-d8	104	0	81-120		%REC	1	03/16/20 02:39 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:** *25-Mar-20*

CLIENT: GHD
Work Order: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_200322A

The QC data in batch 95462 applies to the following samples: 2003111-01E, 2003111-02E, 2003111-03E, 2003111-04E, 2003111-05E

Sample ID: **MB-95462** Batch ID: **95462** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_200322A** Analysis Date: **3/22/2020 9:58:24 AM** Prep Date: **3/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0375		0.1000		37.5	47	142			S
Surr: Octacosane	0.0569		0.1000		56.9	51	124			

Sample ID: **LCS-95462** Batch ID: **95462** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_200322A** Analysis Date: **3/22/2020 10:07:28 AM** Prep Date: **3/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.06	0.100	1.250	0	85.1	50	114			
Surr: Isopropylbenzene	0.0624		0.1000		62.4	47	142			
Surr: Octacosane	0.0813		0.1000		81.3	51	124			

Sample ID: **LCSD-95462** Batch ID: **95462** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_200322A** Analysis Date: **3/22/2020 10:16:31 AM** Prep Date: **3/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.12	0.100	1.250	0	89.9	50	114	5.54	30	
Surr: Isopropylbenzene	0.0866		0.1000		86.6	47	142	0	0	
Surr: Octacosane	0.0836		0.1000		83.6	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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_200320A

The QC data in batch 95551 applies to the following samples: 2003111-01B, 2003111-02B, 2003111-03B, 2003111-04B, 2003111-05B, 2003111-06B, 2003111-07B

Sample ID: **LCS-95551** Batch ID: **95551** TestNo: **M8015V** Units: **mg/L**
SampType: **LCS** Run ID: **GC4_200320A** Analysis Date: **3/20/2020 10:37:13 AM** Prep Date: **3/20/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.71	0.100	2.500	0	108	67	136			
Surr: Tetrachlorethene	0.452		0.4000		113	74	138			

Sample ID: **LCSD-95551** Batch ID: **95551** TestNo: **M8015V** Units: **mg/L**
SampType: **LCSD** Run ID: **GC4_200320A** Analysis Date: **3/20/2020 11:00:23 AM** Prep Date: **3/20/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.69	0.100	2.500	0	108	67	136	0.482	30	
Surr: Tetrachlorethene	0.467		0.4000		117	74	138	0	0	

Sample ID: **MB-95551** Batch ID: **95551** TestNo: **M8015V** Units: **mg/L**
SampType: **MBLK** Run ID: **GC4_200320A** Analysis Date: **3/20/2020 12:11:10 PM** Prep Date: **3/20/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.455		0.4000		114	74	138			

Sample ID: **2003111-01BMS** Batch ID: **95551** TestNo: **M8015V** Units: **mg/L**
SampType: **MS** Run ID: **GC4_200320A** Analysis Date: **3/20/2020 4:27:55 PM** Prep Date: **3/20/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.52	0.100	2.500	0	101	67	136			
Surr: Tetrachlorethene	0.487		0.4000		122	74	138			

Sample ID: **2003111-01BMSD** Batch ID: **95551** TestNo: **M8015V** Units: **mg/L**
SampType: **MSD** Run ID: **GC4_200320A** Analysis Date: **3/20/2020 4:51:37 PM** Prep Date: **3/20/2020**

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	10.0	30	
Surr: Tetrachlorethene	0.486		0.4000		122	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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_200316A

The QC data in batch 95427 applies to the following samples: 2003111-01C, 2003111-02C, 2003111-03C, 2003111-04C, 2003111-05C

Sample ID: **MB-95427**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MBLK**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 11:56:46 AM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-95427**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCS**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 12:01:18 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00193	0.000200	0.00200	0	96.5	85	115			

Sample ID: **LCSD-95427**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCSD**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 12:03:34 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00191	0.000200	0.00200	0	95.5	85	115	1.04	15	

Sample ID: **2003080-01A MS**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MS**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 12:08:06 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0109	0.00100	0.0100	0.00114	97.6	80	120			

Sample ID: **2003080-01A MSD**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MSD**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 12:10:21 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0111	0.00100	0.0100	0.00114	99.6	80	120	1.82	15	

Sample ID: **2003080-01A SD**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **SD**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 12:12:37 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.00200	0.00500	0	0.00114				0	10	

Sample ID: **2003080-01A PDS**	Batch ID: **95427**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **PDS**	Run ID: **CETAC2_HG_200316A**	Analysis Date: **3/16/2020 12:14:53 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0130	0.00100	0.0125	0.00114	95.2	85	115			

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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_200317C

The QC data in batch 95430 applies to the following samples: 2003111-01C, 2003111-02C, 2003111-03C, 2003111-04C, 2003111-05C

Sample ID: **MB-95430** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 11:47:00 AM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00500								
Lead	<0.000300	0.00100								
Selenium	<0.00200	0.00500								
Silver	<0.00100	0.00200								

Sample ID: **LCS-95430** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 11:49:00 AM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.201	0.00500	0.200	0	101	80	120			
Barium	0.202	0.0100	0.200	0	101	80	120			
Cadmium	0.201	0.00100	0.200	0	101	80	120			
Chromium	0.198	0.00500	0.200	0	98.8	80	120			
Lead	0.194	0.00100	0.200	0	97.1	80	120			
Selenium	0.205	0.00500	0.200	0	103	80	120			
Silver	0.198	0.00200	0.200	0	98.9	80	120			

Sample ID: **LCSD-95430** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 11:52:00 AM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.200	0.00500	0.200	0	100	80	120	0.625	15	
Barium	0.199	0.0100	0.200	0	99.3	80	120	1.48	15	
Cadmium	0.199	0.00100	0.200	0	99.3	80	120	1.41	15	
Chromium	0.197	0.00500	0.200	0	98.4	80	120	0.364	15	
Lead	0.194	0.00100	0.200	0	97.0	80	120	0.044	15	
Selenium	0.204	0.00500	0.200	0	102	80	120	0.360	15	
Silver	0.197	0.00200	0.200	0	98.3	80	120	0.697	15	

Sample ID: **2003108-02D SD** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 11:58:00 AM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.0100	0.0250	0	0.00583				0	20	
Barium	0.211	0.0500	0	0.214				1.59	20	
Cadmium	<0.00150	0.00500	0	0				0	20	
Chromium	<0.0100	0.0250	0	0				0	20	

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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_200317C

Sample ID: **2003108-02D SD** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 11:58:00 AM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	<0.00150	0.00500	0	0.000300				0	20	
Selenium	0.0107	0.0250	0	0.0110				2.01	20	
Silver	<0.00500	0.0100	0	0				0	20	

Sample ID: **2003108-02D PDS** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 12:16:00 PM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.193	0.00500	0.200	0.00583	93.8	75	125			
Barium	0.408	0.0100	0.200	0.214	96.8	75	125			
Cadmium	0.201	0.00100	0.200	0	100	75	125			
Chromium	0.202	0.00500	0.200	0	101	75	125			
Lead	0.199	0.00100	0.200	0.000300	99.5	75	125			
Selenium	0.196	0.00500	0.200	0.0110	92.6	75	125			
Silver	0.198	0.00200	0.200	0	99.0	75	125			

Sample ID: **2003108-02D MS** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 12:18:00 PM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.195	0.00500	0.200	0.00583	94.7	75	125			
Barium	0.416	0.0100	0.200	0.214	101	75	125			
Cadmium	0.197	0.00100	0.200	0	98.4	75	125			
Chromium	0.195	0.00500	0.200	0	97.3	75	125			
Lead	0.196	0.00100	0.200	0.000300	98.0	75	125			
Selenium	0.198	0.00500	0.200	0.0110	93.4	75	125			
Silver	0.195	0.00200	0.200	0	97.7	75	125			

Sample ID: **2003108-02D MSD** Batch ID: **95430** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS5_200317C** Analysis Date: **3/17/2020 12:20:00 PM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.198	0.00500	0.200	0.00583	95.9	75	125	1.23	15	
Barium	0.412	0.0100	0.200	0.214	99.2	75	125	0.934	15	
Cadmium	0.197	0.00100	0.200	0	98.6	75	125	0.184	15	
Chromium	0.197	0.00500	0.200	0	98.3	75	125	0.998	15	
Lead	0.196	0.00100	0.200	0.000300	97.8	75	125	0.144	15	
Selenium	0.202	0.00500	0.200	0.0110	95.3	75	125	1.91	15	
Silver	0.197	0.00200	0.200	0	98.3	75	125	0.617	15	

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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_200316A

The QC data in batch 95445 applies to the following samples: 2003111-01A, 2003111-02A, 2003111-03A, 2003111-04A, 2003111-05A, 2003111-06A, 2003111-07A

Sample ID: **LCS-95445** Batch ID: **95445** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS5_200316A** Analysis Date: **3/16/2020 12:11:00 PM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0228	0.00100	0.0232	0	98.1	81	122			
Ethylbenzene	0.0230	0.00100	0.0232	0	99.2	80	120			
m,p-Xylene	0.0470	0.00200	0.0464	0	101	80	120			
o-Xylene	0.0239	0.00100	0.0232	0	103	80	120			
Toluene	0.0230	0.00200	0.0232	0	99.1	80	120			
Surr: 1,2-Dichloroethane-d4	192		200.0		95.8	72	119			
Surr: 4-Bromofluorobenzene	198		200.0		99.2	76	119			
Surr: Dibromofluoromethane	203		200.0		102	85	115			
Surr: Toluene-d8	198		200.0		99.1	81	120			

Sample ID: **MB-95445** Batch ID: **95445** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS5_200316A** Analysis Date: **3/16/2020 1:00:00 PM** Prep Date: **3/16/2020**

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		96.5	72	119			
Surr: 4-Bromofluorobenzene	207		200.0		104	76	119			
Surr: Dibromofluoromethane	199		200.0		99.7	85	115			
Surr: Toluene-d8	207		200.0		103	81	120			

Sample ID: **2003072-03AMS** Batch ID: **95445** TestNo: **SW8260D** Units: **mg/L**
SampType: **MS** Run ID: **GCMS5_200316A** Analysis Date: **3/16/2020 5:56:00 PM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0245	0.00100	0.0232	0	106	81	122			
Ethylbenzene	0.0235	0.00100	0.0232	0	101	80	120			
m,p-Xylene	0.0482	0.00200	0.0464	0	104	80	120			
o-Xylene	0.0242	0.00100	0.0232	0	104	80	120			
Toluene	0.0243	0.00200	0.0232	0	105	80	120			
Surr: 1,2-Dichloroethane-d4	200		200.0		100	72	119			
Surr: 4-Bromofluorobenzene	193		200.0		96.5	76	119			
Surr: Dibromofluoromethane	208		200.0		104	85	115			
Surr: Toluene-d8	195		200.0		97.7	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

CLIENT: GHD
Work Order: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_200316A

Sample ID: **2003072-03AMSD** Batch ID: **95445** TestNo: **SW8260D** Units: **mg/L**
SampType: **MSD** Run ID: **GCMS5_200316A** Analysis Date: **3/16/2020 6:21:00 PM** Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0248	0.00100	0.0232	0	107	81	120	0.941	20	
Ethylbenzene	0.0239	0.00100	0.0232	0	103	80	120	1.78	20	
m,p-Xylene	0.0489	0.00200	0.0464	0	105	80	120	1.33	20	
o-Xylene	0.0248	0.00100	0.0232	0	107	80	120	2.40	20	
Toluene	0.0247	0.00200	0.0232	0	107	80	120	1.75	20	
Surr: 1,2-Dichloroethane-d4	198		200.0		98.8	72	119	0	0	
Surr: 4-Bromofluorobenzene	196		200.0		98.2	76	119	0	0	
Surr: Dibromofluoromethane	207		200.0		103	85	115	0	0	
Surr: Toluene-d8	197		200.0		98.5	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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_200317A

The QC data in batch 95470 applies to the following samples: 2003111-01D, 2003111-02D, 2003111-03D, 2003111-04D, 2003111-05D

Sample ID: MB-95470	Batch ID: 95470	TestNo: E300	Units: mg/L
SampType: MBLK	Run ID: IC4_200317A	Analysis Date: 3/17/2020 12:44:44 PM	Prep Date: 3/17/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								

Sample ID: LCS-95470	Batch ID: 95470	TestNo: E300	Units: mg/L
SampType: LCS	Run ID: IC4_200317A	Analysis Date: 3/17/2020 1:16:44 PM	Prep Date: 3/17/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			

Sample ID: LCSD-95470	Batch ID: 95470	TestNo: E300	Units: mg/L
SampType: LCSD	Run ID: IC4_200317A	Analysis Date: 3/17/2020 1:32:44 PM	Prep Date: 3/17/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.4	1.00	10.00	0	104	90	110	0.248	20	

Sample ID: 2003111-01DMS	Batch ID: 95470	TestNo: E300	Units: mg/L
SampType: MS	Run ID: IC4_200317A	Analysis Date: 3/17/2020 5:52:19 PM	Prep Date: 3/17/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	299	10.0	200.0	124.3	87.1	90	110			S

Sample ID: 2003111-01DMSD	Batch ID: 95470	TestNo: E300	Units: mg/L
SampType: MSD	Run ID: IC4_200317A	Analysis Date: 3/17/2020 6:08:19 PM	Prep Date: 3/17/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	315	10.0	200.0	124.3	95.2	90	110	5.29	20	

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: 2003111
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: **WC_200316B**

The QC data in batch 95449 applies to the following samples: 2003111-01D, 2003111-02D, 2003111-03D, 2003111-04D, 2003111-05D

Sample ID: **MB-95449**	Batch ID: **95449**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_200316B**	Analysis Date: **3/16/2020 4:45:00 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-95449**	Batch ID: **95449**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_200316B**	Analysis Date: **3/16/2020 4:45:00 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	760	10.0	745.6	0	102	90	113			

Sample ID: **2003087-02D-DUP**	Batch ID: **95449**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_200316B**	Analysis Date: **3/16/2020 4:45:00 PM**	Prep Date: **3/16/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	2050	50.0	0	2045				0.244	5	

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 25, 2020

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

Order No.: 2006184

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 6 sample(s) on 6/17/2020 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: T104704211-20-25

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

№ 71162
CHAIN-OF-CUSTODY

CLIENT: GHD
ADDRESS: 1496 E W 6TH AVE #800 GOLDEN, 80401
PHONE: 303 941 6156 FAX/E-MAIL: BRAD.STEPHENSON@GHD.COM
DATA REPORTED TO: BRAD STEPHENSON
ADDITIONAL REPORT COPIES TO: J CLOUD

DATE: 6/16/20 PAGE 1 OF
PO #: DHL WORK ORDER #: 2006184
PROJECT LOCATION OR NAME: HOBBS TANK
CLENT PROJECT #: 112111520 COLLECTOR: B STEPHENSON

Authorize 5% surcharge for TRRP Report? ❑ Yes ❑ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT
P=PAINT SL=SLUDGE O=OTHER SO=SOLID

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ❑ NaOH ❑	ICE	UNPRESERVED	ANALYSES: BTEX ❑ MTBE ❑ [METHOD 8021]	TPH 1005 ❑ TPH 1006 ❑ HOLD 1006 ❑	GRO [METHOD 8015] ❑ DRO [METHOD 8015] ❑	VOC 8260 ❑ VOC 624 ❑ VOC 8260/5035 ❑	SVOC 8270 ❑ PAH 8270 ❑ HOLD PAH ❑ SVOC 625 ❑	8270 PEST ❑ 625 PEST/PCB ❑ 608 PCB ❑ 8270 PCB ❑	8270 O-P PEST ❑ 8082 PCB ❑ T PHOS, AMMONIA ❑	8321 HERB ❑ T PHOS, AMMONIA ❑	METALS 6020 ❑ METALS 200.8 ❑ DISS. METALS ❑	RCRA ❑ TX11 ❑	PH ❑ HEX CHROM ❑ ALKALINITY ❑ COD ❑	CHLORIDE ❑ ANIONS ❑	TCLP-SVOC ❑ VOC ❑ PEST ❑ HERB ❑	TCLP-METALS ❑ RCRA 8 ❑ TX-11 ❑ Pb ❑	RCI ❑ FLASHPOINT ❑ DGAS ❑	TDS ❑ TSS ❑ % MOISTURE ❑ CYANIDE ❑	FIELD NOTES
MW-3	01	6/16/20	1030	W		10						X		X						X		X	X			X			
MW-4	02	6/16/20	1010	W		10						X		X						X		X	X			X			
MW-5	03	6/16/20	0900	W		10						X		X						X		X	X			X			
MW-5D	04	6/16/20	0900	W		10						X		X						X		X	X			X			
HTRW-1	05	6/16/20	0930	W		10						X		X						X		X	X			X			
TRIP	06	—		W								X		X						X		X	X			X			

SMO

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
	6/16/20 1430	FED EX
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
	6-17-2020 0710	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)

❑ DHL DISPOSAL @ $5.00 each ❑ Return

TURN AROUND TIME
RUSH ❑ CALL FIRST
1 DAY ❑ CALL FIRST
2 DAY ❑
NORMAL ☒
OTHER ❑

LABORATORY USE ONLY:
RECEIVING TEMP: 2.9 THERM #: 78
CUSTODY SEALS: ❑ BROKEN ❑ INTACT ☒ NOT USED
CARRIER: ❑ LONE STAR ☒ FEDEX ❑ UPS ❑ OTHER
❑ COURIER DELIVERY
❑ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

ORIGIN ID:HOBA (303) 941-6156
BRAD STEPHENSON

14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 16JUN20
ACTWGT: 51.90 LB
CAD: 6994246/SSFE2110
DIMS: 23x14x13 IN

BILL THIRD PARTY

TO

DHL
2300 DOUBLE CREEK DR
REF# 078863
ROUND ROCK TX 78664

(512) 388-8222 REF: 078863
INV:
PO: DEPT:

FedEx Express

WED - 17 JUN 10:30A
PRIORITY OVERNIGHT

TRK# 0201 3939 2511 7918

A8 BSMA

78664
TX-US AUS

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 6/17/2020

Work Order Number 2006184 Received by: JH

Checklist completed by: _____ 6/17/2020 Reviewed by _____ 6/17/2020
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping 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 ☐	2.9 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? No		Checked by EL
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:** *25-Jun-20*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2006184

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, E300 and Standard Methods.

For Volatiles analysis an MS/MSD was not performed due to insufficient sample volume. The QC includes the method blank and LCS.

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

All method blanks, sample duplicates, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For Anions analysis by method E300 the matrix spike recovery was slightly below control limits for Chloride. This is flagged accordingly in the enclosed QC summary report. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits for this analyte. No further corrective actions were taken.

DHL Analytical, Inc.

Date: *25-Jun-20*

CLIENT:	GHD	**Client Sample ID:**	MW-3
Project:	Hobbs Tank	**Lab ID:**	2006184-01
Project No:	11211520	**Collection Date:**	06/16/20 10:30 AM
Lab Order:	2006184	**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	0.147	0.184	J	mg/L	1	06/23/20 11:47 AM
Surr: Isopropylbenzene	58.6	0	47-142		%REC	1	06/23/20 11:47 AM
Surr: Octacosane	93.0	0	51-124		%REC	1	06/23/20 11:47 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/22/20 03:31 PM
Surr: Tetrachlorethene	123	0	74-138		%REC	1	06/22/20 03:31 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.00959	0.00200	0.00500		mg/L	1	06/23/20 11:31 AM
Barium	0.172	0.00300	0.0100		mg/L	1	06/23/20 11:31 AM
Cadmium	0.00134	0.000300	0.00100		mg/L	1	06/23/20 11:31 AM
Chromium	0.00844	0.00200	0.00500		mg/L	1	06/23/20 11:31 AM
Lead	0.00100	0.000300	0.00100		mg/L	1	06/23/20 11:31 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:31 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	06/23/20 11:31 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	06/22/20 12:48 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 07:19 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 07:19 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 07:19 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 07:19 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 07:19 PM
Surr: 1,2-Dichloroethane-d4	112	0	72-119		%REC	1	06/22/20 07:19 PM
Surr: 4-Bromofluorobenzene	97.9	0	76-119		%REC	1	06/22/20 07:19 PM
Surr: Dibromofluoromethane	109	0	85-115		%REC	1	06/22/20 07:19 PM
Surr: Toluene-d8	93.5	0	81-120		%REC	1	06/22/20 07:19 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	117	3.00	10.0		mg/L	10	06/17/20 04:55 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	914	10.0	10.0		mg/L	1	06/19/20 06:00 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: *25-Jun-20*

CLIENT:	GHD	**Client Sample ID:**	MW-4
Project:	Hobbs Tank	**Lab ID:**	2006184-02
Project No:	11211520	**Collection Date:**	06/16/20 10:10 AM
Lab Order:	2006184	**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	06/23/20 12:00 PM
Surr: Isopropylbenzene	63.2	0	47-142		%REC	1	06/23/20 12:00 PM
Surr: Octacosane	78.7	0	51-124		%REC	1	06/23/20 12:00 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/22/20 03:55 PM
Surr: Tetrachlorethene	125	0	74-138		%REC	1	06/22/20 03:55 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.0112	0.00200	0.00500		mg/L	1	06/23/20 11:33 AM
Barium	0.122	0.00300	0.0100		mg/L	1	06/23/20 11:33 AM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	06/23/20 11:33 AM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:33 AM
Lead	0.00137	0.000300	0.00100		mg/L	1	06/23/20 11:33 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:33 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	06/23/20 11:33 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	06/22/20 12:50 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 07:44 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 07:44 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 07:44 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 07:44 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 07:44 PM
Surr: 1,2-Dichloroethane-d4	112	0	72-119		%REC	1	06/22/20 07:44 PM
Surr: 4-Bromofluorobenzene	96.8	0	76-119		%REC	1	06/22/20 07:44 PM
Surr: Dibromofluoromethane	108	0	85-115		%REC	1	06/22/20 07:44 PM
Surr: Toluene-d8	92.8	0	81-120		%REC	1	06/22/20 07:44 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	22.5	3.00	10.0		mg/L	10	06/17/20 05:43 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	596	10.0	10.0		mg/L	1	06/19/20 06:00 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: *25-Jun-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5
Project:	Hobbs Tank	**Lab ID:**	2006184-03
Project No:	11211520	**Collection Date:**	06/16/20 09:00 AM
Lab Order:	2006184	**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	0.185		mg/L	1	06/23/20 12:09 PM
Surr: Isopropylbenzene	56.2	0	47-142		%REC	1	06/23/20 12:09 PM
Surr: Octacosane	95.4	0	51-124		%REC	1	06/23/20 12:09 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/22/20 04:20 PM
Surr: Tetrachlorethene	121	0	74-138		%REC	1	06/22/20 04:20 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.00525	0.00200	0.00500		mg/L	1	06/23/20 11:24 AM
Barium	0.193	0.00300	0.0100		mg/L	1	06/23/20 11:24 AM
Cadmium	0.000400	0.000300	0.00100	J	mg/L	1	06/23/20 11:24 AM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:24 AM
Lead	0.00108	0.000300	0.00100		mg/L	1	06/23/20 11:24 AM
Selenium	0.00247	0.00200	0.00500	J	mg/L	1	06/23/20 11:24 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	06/23/20 11:24 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	06/22/20 12:53 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 08:09 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 08:09 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 08:09 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 08:09 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 08:09 PM
Surr: 1,2-Dichloroethane-d4	112	0	72-119		%REC	1	06/22/20 08:09 PM
Surr: 4-Bromofluorobenzene	98.9	0	76-119		%REC	1	06/22/20 08:09 PM
Surr: Dibromofluoromethane	108	0	85-115		%REC	1	06/22/20 08:09 PM
Surr: Toluene-d8	92.3	0	81-120		%REC	1	06/22/20 08:09 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	92.9	3.00	10.0		mg/L	10	06/17/20 05:59 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	720	10.0	10.0		mg/L	1	06/19/20 06:00 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: *25-Jun-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5D
Project:	Hobbs Tank	**Lab ID:**	2006184-04
Project No:	11211520	**Collection Date:**	06/16/20 09:00 AM
Lab Order:	2006184	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.166	0.148	0.186	J	mg/L	1	06/23/20 12:18 PM
Surr: Isopropylbenzene	60.1	0	47-142		%REC	1	06/23/20 12:18 PM
Surr: Octacosane	97.1	0	51-124		%REC	1	06/23/20 12:18 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	06/22/20 04:44 PM
Surr: Tetrachlorethene	116	0	74-138		%REC	1	06/22/20 04:44 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.00498	0.00200	0.00500	J	mg/L	1	06/23/20 11:35 AM
Barium	0.183	0.00300	0.0100		mg/L	1	06/23/20 11:35 AM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	06/23/20 11:35 AM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:35 AM
Lead	0.000479	0.000300	0.00100	J	mg/L	1	06/23/20 11:35 AM
Selenium	0.00294	0.00200	0.00500	J	mg/L	1	06/23/20 11:35 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	06/23/20 11:35 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	06/22/20 12:55 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 08:34 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 08:34 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 08:34 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 08:34 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 08:34 PM
Surr: 1,2-Dichloroethane-d4	114	0	72-119		%REC	1	06/22/20 08:34 PM
Surr: 4-Bromofluorobenzene	98.7	0	76-119		%REC	1	06/22/20 08:34 PM
Surr: Dibromofluoromethane	108	0	85-115		%REC	1	06/22/20 08:34 PM
Surr: Toluene-d8	92.2	0	81-120		%REC	1	06/22/20 08:34 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	98.8	3.00	10.0		mg/L	10	06/17/20 06:15 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	721	10.0	10.0		mg/L	1	06/19/20 06:00 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: *25-Jun-20*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2006184-05
Project No:	11211520	**Collection Date:**	06/16/20 09:30 AM
Lab Order:	2006184	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.288	0.150	0.188		mg/L	1	06/23/20 12:27 PM
Surr: Isopropylbenzene	73.3	0	47-142		%REC	1	06/23/20 12:27 PM
Surr: Octacosane	93.0	0	51-124		%REC	1	06/23/20 12:27 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	0.116	0.0600	0.100		mg/L	1	06/22/20 05:08 PM
Surr: Tetrachlorethene	117	0	74-138		%REC	1	06/22/20 05:08 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.00629	0.00200	0.00500		mg/L	1	06/23/20 11:37 AM
Barium	0.0949	0.00300	0.0100		mg/L	1	06/23/20 11:37 AM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	06/23/20 11:37 AM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:37 AM
Lead	0.000350	0.000300	0.00100	J	mg/L	1	06/23/20 11:37 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	06/23/20 11:37 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	06/23/20 11:37 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	06/22/20 12:57 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	0.0706	0.000300	0.00100		mg/L	1	06/22/20 08:58 PM
Ethylbenzene	0.000960	0.000300	0.00100	J	mg/L	1	06/22/20 08:58 PM
m,p-Xylene	0.00206	0.000600	0.00200		mg/L	1	06/22/20 08:58 PM
o-Xylene	0.00240	0.000300	0.00100		mg/L	1	06/22/20 08:58 PM
Toluene	0.0110	0.000600	0.00200		mg/L	1	06/22/20 08:58 PM
Surr: 1,2-Dichloroethane-d4	114	0	72-119		%REC	1	06/22/20 08:58 PM
Surr: 4-Bromofluorobenzene	97.6	0	76-119		%REC	1	06/22/20 08:58 PM
Surr: Dibromofluoromethane	107	0	85-115		%REC	1	06/22/20 08:58 PM
Surr: Toluene-d8	92.3	0	81-120		%REC	1	06/22/20 08:58 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	39.6	3.00	10.0		mg/L	10	06/17/20 06:31 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	527	10.0	10.0		mg/L	1	06/19/20 06:00 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: *25-Jun-20*

CLIENT:	GHD	**Client Sample ID:**	Trip
Project:	Hobbs Tank	**Lab ID:**	2006184-06
Project No:	11211520	**Collection Date:**	06/16/20
Lab Order:	2006184	**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	06/22/20 01:55 PM
Surr: Tetrachlorethene	119	0	74-138		%REC	1	06/22/20 01:55 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 05:40 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 05:40 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 05:40 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	06/22/20 05:40 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	06/22/20 05:40 PM
Surr: 1,2-Dichloroethane-d4	108	0	72-119		%REC	1	06/22/20 05:40 PM
Surr: 4-Bromofluorobenzene	96.9	0	76-119		%REC	1	06/22/20 05:40 PM
Surr: Dibromofluoromethane	106	0	85-115		%REC	1	06/22/20 05:40 PM
Surr: Toluene-d8	93.0	0	81-120		%REC	1	06/22/20 05:40 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:** *25-Jun-20*

CLIENT: GHD
Work Order: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_200623A

The QC data in batch 96868 applies to the following samples: 2006184-01E, 2006184-02E, 2006184-03E, 2006184-04E, 2006184-05E

Sample ID: **MB-96868** Batch ID: **96868** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_200623A** Analysis Date: **6/23/2020 11:04:24 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0540		0.1000		54.0	47	142			
Surr: Octacosane	0.0808		0.1000		80.8	51	124			

Sample ID: **LCS-96868** Batch ID: **96868** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_200623A** Analysis Date: **6/23/2020 11:13:28 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.955	0.100	1.250	0	76.4	50	114			
Surr: Isopropylbenzene	0.0546		0.1000		54.6	47	142			
Surr: Octacosane	0.0847		0.1000		84.7	51	124			

Sample ID: **LCSD-96868** Batch ID: **96868** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_200623A** Analysis Date: **6/23/2020 11:38:21 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.950	0.100	1.250	0	76.0	50	114	0.451	30	
Surr: Isopropylbenzene	0.0550		0.1000		55.0	47	142	0	0	
Surr: Octacosane	0.0847		0.1000		84.7	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: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_200622A

The QC data in batch 96877 applies to the following samples: 2006184-01B, 2006184-02B, 2006184-03B, 2006184-04B, 2006184-05B, 2006184-06B

Sample ID: **LCS-96877** Batch ID: **96877** TestNo: **M8015V** Units: **mg/L**
SampType: **LCS** Run ID: **GC4_200622A** Analysis Date: **6/22/2020 11:54:12 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.50	0.100	2.500	0	99.9	67	136			
Surr: Tetrachlorethene	0.409		0.4000		102	74	138			

Sample ID: **LCSD-96877** Batch ID: **96877** TestNo: **M8015V** Units: **mg/L**
SampType: **LCSD** Run ID: **GC4_200622A** Analysis Date: **6/22/2020 12:19:05 PM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.60	0.100	2.500	0	104	67	136	3.82	30	
Surr: Tetrachlorethene	0.413		0.4000		103	74	138	0	0	

Sample ID: **MB-96877** Batch ID: **96877** TestNo: **M8015V** Units: **mg/L**
SampType: **MBLK** Run ID: **GC4_200622A** Analysis Date: **6/22/2020 1:31:11 PM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.443		0.4000		111	74	138			

Sample ID: **2006184-01BMSD** Batch ID: **96877** TestNo: **M8015V** Units: **mg/L**
SampType: **MSD** Run ID: **GC4_200622A** Analysis Date: **6/22/2020 11:13:50 PM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.46	0.100	2.500	0	98.5	67	136	2.86	30	
Surr: Tetrachlorethene	0.404		0.4000		101	74	138	0	0	

Sample ID: **2006184-01BMS** Batch ID: **96877** TestNo: **M8015V** Units: **mg/L**
SampType: **MS** Run ID: **GC4_200622A** Analysis Date: **6/23/2020 10:20:57 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.39	0.100	2.500	0	95.8	67	136			
Surr: Tetrachlorethene	0.364		0.4000		91.1	74	138			

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: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_200622A

The QC data in batch 96869 applies to the following samples: 2006184-01C, 2006184-02C, 2006184-03C, 2006184-04C, 2006184-05C

Sample ID: **MB-96869**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MBLK**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:23:40 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-96869**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCS**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:28:12 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00214	0.000200	0.00200	0	107	85	115			

Sample ID: **LCSD-96869**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCSD**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:30:28 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00214	0.000200	0.00200	0	107	85	115	0	15	

Sample ID: **2006167-01A MS**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MS**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:35:00 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0104	0.00100	0.0100	0	104	80	120			

Sample ID: **2006167-01A MSD**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MSD**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:37:15 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0102	0.00100	0.0100	0	103	80	120	1.45	15	

Sample ID: **2006167-01A SD**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **SD**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:39:31 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.00200	0.00500	0	0				0	10	

Sample ID: **2006167-01A PDS**	Batch ID: **96869**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **PDS**	Run ID: **CETAC2_HG_200622A**	Analysis Date: **6/22/2020 12:41:47 PM**	Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0122	0.00100	0.0125	0	97.6	85	115			

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: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_200623A

The QC data in batch 96873 applies to the following samples: 2006184-01C, 2006184-02C, 2006184-03C, 2006184-04C, 2006184-05C

Sample ID: **MB-96873** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:15:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00500								
Lead	<0.000300	0.00100								
Selenium	<0.00200	0.00500								
Silver	<0.00100	0.00200								

Sample ID: **LCS-96873** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:17:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00500	0.200	0	102	80	120			
Barium	0.200	0.0100	0.200	0	100	80	120			
Cadmium	0.202	0.00100	0.200	0	101	80	120			
Chromium	0.199	0.00500	0.200	0	99.7	80	120			
Lead	0.192	0.00100	0.200	0	96.2	80	120			
Selenium	0.206	0.00500	0.200	0	103	80	120			
Silver	0.195	0.00200	0.200	0	97.4	80	120			

Sample ID: **LCSD-96873** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:20:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.199	0.00500	0.200	0	99.6	80	120	2.23	15	
Barium	0.197	0.0100	0.200	0	98.4	80	120	1.72	15	
Cadmium	0.201	0.00100	0.200	0	101	80	120	0.641	15	
Chromium	0.195	0.00500	0.200	0	97.5	80	120	2.21	15	
Lead	0.191	0.00100	0.200	0	95.7	80	120	0.553	15	
Selenium	0.200	0.00500	0.200	0	99.8	80	120	3.21	15	
Silver	0.193	0.00200	0.200	0	96.3	80	120	1.15	15	

Sample ID: **2006184-03C SD** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:26:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.0100	0.0250	0	0.00525				0	20	
Barium	0.194	0.0500	0	0.193				0.237	20	
Cadmium	<0.00150	0.00500	0	0.000400				0	20	
Chromium	<0.0100	0.0250	0	0				0	20	

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: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_200623A

Sample ID: **2006184-03C SD** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:26:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	<0.00150	0.00500	0	0.00108				0	20	
Selenium	<0.0100	0.0250	0	0.00247				0	20	
Silver	<0.00500	0.0100	0	0				0	20	

Sample ID: **2006184-03C PDS** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:48:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.201	0.00500	0.200	0.00525	98.1	75	125			
Barium	0.396	0.0100	0.200	0.193	101	75	125			
Cadmium	0.209	0.00100	0.200	0.000400	105	75	125			
Chromium	0.214	0.00500	0.200	0	107	75	125			
Lead	0.206	0.00100	0.200	0.00108	103	75	125			
Selenium	0.195	0.00500	0.200	0.00247	96.4	75	125			
Silver	0.197	0.00200	0.200	0	98.4	75	125			

Sample ID: **2006184-03C MS** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:51:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.198	0.00500	0.200	0.00525	96.3	75	125			
Barium	0.392	0.0100	0.200	0.193	99.6	75	125			
Cadmium	0.199	0.00100	0.200	0.000400	99.4	75	125			
Chromium	0.198	0.00500	0.200	0	99.1	75	125			
Lead	0.195	0.00100	0.200	0.00108	96.7	75	125			
Selenium	0.189	0.00500	0.200	0.00247	93.1	75	125			
Silver	0.191	0.00200	0.200	0	95.4	75	125			

Sample ID: **2006184-03C MSD** Batch ID: **96873** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS5_200623A** Analysis Date: **6/23/2020 11:53:00 AM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.196	0.00500	0.200	0.00525	95.6	75	125	0.734	15	
Barium	0.399	0.0100	0.200	0.193	103	75	125	1.66	15	
Cadmium	0.199	0.00100	0.200	0.000400	99.2	75	125	0.165	15	
Chromium	0.199	0.00500	0.200	0	99.7	75	125	0.567	15	
Lead	0.194	0.00100	0.200	0.00108	96.6	75	125	0.106	15	
Selenium	0.189	0.00500	0.200	0.00247	93.4	75	125	0.269	15	
Silver	0.193	0.00200	0.200	0	96.3	75	125	0.897	15	

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: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_200622B

The QC data in batch 96880 applies to the following samples: 2006184-01A, 2006184-02A, 2006184-03A, 2006184-04A, 2006184-05A, 2006184-06A

Sample ID: **LCS-96880** Batch ID: **96880** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS7_200622B** Analysis Date: **6/22/2020 4:12:00 PM** Prep Date: **6/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0247	0.00100	0.0232	0	106	81	122			
Ethylbenzene	0.0233	0.00100	0.0232	0	101	80	120			
m,p-Xylene	0.0470	0.00200	0.0464	0	101	80	120			
o-Xylene	0.0234	0.00100	0.0232	0	101	80	120			
Toluene	0.0253	0.00200	0.0232	0	109	80	120			
Surr: 1,2-Dichloroethane-d4	209		200.0		104	72	119			
Surr: 4-Bromofluorobenzene	195		200.0		97.3	76	119			
Surr: Dibromofluoromethane	213		200.0		106	85	115			
Surr: Toluene-d8	188		200.0		93.8	81	120			

Sample ID: **MB-96880** Batch ID: **96880** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS7_200622B** Analysis Date: **6/22/2020 5:15:00 PM** Prep Date: **6/22/2020**

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	212		200.0		106	72	119			
Surr: 4-Bromofluorobenzene	194		200.0		96.9	76	119			
Surr: Dibromofluoromethane	215		200.0		107	85	115			
Surr: Toluene-d8	186		200.0		92.8	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

CLIENT: GHD
Work Order: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_200617A

The QC data in batch 96840 applies to the following samples: 2006184-01D, 2006184-02D, 2006184-03D, 2006184-04D, 2006184-05D

Sample ID: **MB-96840**	Batch ID: **96840**	TestNo: **E300**	Units: **mg/L**
SampType: **MBLK**	Run ID: **IC2_200617A**	Analysis Date: **6/17/2020 1:33:25 PM**	Prep Date: **6/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								

Sample ID: **LCS-96840**	Batch ID: **96840**	TestNo: **E300**	Units: **mg/L**
SampType: **LCS**	Run ID: **IC2_200617A**	Analysis Date: **6/17/2020 3:03:11 PM**	Prep Date: **6/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.55	1.00	10.00	0	95.5	90	110			

Sample ID: **LCSD-96840**	Batch ID: **96840**	TestNo: **E300**	Units: **mg/L**
SampType: **LCSD**	Run ID: **IC2_200617A**	Analysis Date: **6/17/2020 3:19:11 PM**	Prep Date: **6/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.55	1.00	10.00	0	95.5	90	110	0.012	20	

Sample ID: **2006184-01DMS**	Batch ID: **96840**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_200617A**	Analysis Date: **6/17/2020 5:11:24 PM**	Prep Date: **6/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	285	10.0	200.0	117.0	83.8	90	110			S

Sample ID: **2006184-01DMSD**	Batch ID: **96840**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_200617A**	Analysis Date: **6/17/2020 5:27:24 PM**	Prep Date: **6/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	308	10.0	200.0	117.0	95.4	90	110	7.87	20	

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: 2006184
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: **WC_200619B**

The QC data in batch 96865 applies to the following samples: 2006184-01D, 2006184-02D, 2006184-03D, 2006184-04D, 2006184-05D

Sample ID: **MB-96865**	Batch ID: **96865**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_200619B**	Analysis Date: **6/19/2020 6:00:00 PM**	Prep Date: **6/19/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-96865**	Batch ID: **96865**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_200619B**	Analysis Date: **6/19/2020 6:00:00 PM**	Prep Date: **6/19/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	765	10.0	745.6	0	103	90	113			

Sample ID: **2006184-01D-DUP**	Batch ID: **96865**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_200619B**	Analysis Date: **6/19/2020 6:00:00 PM**	Prep Date: **6/19/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	929	10.0	0	914.0				1.63	5	

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

DHL ANALYTICAL

September 24, 2020

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

Order No.: 2009128

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 6 sample(s) on 9/17/2020 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: T104704211-20-25

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

№ 69591

CHAIN-OF-CUSTODY

CLIENT: GHD
ADDRESS: 14986 W 6TH AVE #800 GOLDEN, CO 80403
PHONE: 303-941-6156 FAX/E-MAIL: BRAD.STEPHENSON@GHD.COM
DATA REPORTED TO: BSTEPHENSON
ADDITIONAL REPORT COPIES TO: JERONQ

DATE: 9/16/20 PAGE 1 OF 1
PO #: DHL WORK ORDER #: 2009128
PROJECT LOCATION OR NAME: HOBBS TANK
CLENT PROJECT #: 112111520-02 COLLECTOR: BSTEPHENSON

Authorize 5% surcharge for TRRP Report? ❑ Yes ❑ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ❑ NaOH ❑	ICE	UNPRESERVED	ANALYSES: BTEX● MTBE❑ [METHOD 8021]	TPH 1005❑ TPH 1006❑ HOLD 1006❑	GRO [METHOD 8015]● DRO [METHOD 8105]●	VOC 8260❑ VOC 624❑ VOC 8260/5035❑	SVOC 8270❑ PAH 8270❑ HOLD PAH❑ SVOC 625❑	8270 PEST❑ 625 PEST/PCB❑ 608 PCB❑	8270 O-P PEST❑ 8082 PCB❑ 8270 PCB❑	8321 HERB❑ T PHOS, AMMONIA❑	METALS 6020❑ METALS 200.8❑ DISS. METALS❑	RCRA❑ TX11❑	PH❑ HEX CHROM❑ ALKALINITY❑ COD❑	CHLORIDE● ANIONS❑	TCLP-SVOC❑ VOC❑ PEST❑ HERB❑	TCLP-METALS❑ RCRA 8● TX-11❑ Pb❑	RCI❑ FLASHPOINT❑ DGAS❑	TDS● TSS❑ % MOISTURE❑ CYANIDE❑	FIELD NOTES
MW-3	01	9/16/20	1015	W		10						X	X											X		X			
MW-4	02		1100	W		10						X	X											X		X			
MW-5	03		1120	W		10						X	X											X		X			
MW-5D	04		1120	W		10						X	X											X		X			
HTRW-1	05		1145	W		10						X	X											X		X			
TRIP	06	9/16/20	—	W		2						X	X																

GNO

RELINQUISHED BY: (Signature) DATE/TIME 9/16/20 1500 RECEIVED BY: (Signature) to FED EX
RELINQUISHED BY: (Signature) FEDEX DATE/TIME 9/17/20 0935 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

❑ DHL DISPOSAL @ $5.00 each ❑ Return

TURN AROUND TIME
RUSH ❑ CALL FIRST
1 DAY ❑ CALL FIRST
2 DAY ❑
NORMAL ❑
OTHER ❑

LABORATORY USE ONLY:
RECEIVING TEMP: 3.3 °C THERM #: 78
CUSTODY SEALS: ❑ BROKEN ❑ INTACT ☑ NOT USED
CARRIER: ❑ LONE STAR ☑ FEDEX ❑ UPS ❑ OTHER
❑ COURIER DELIVERY
❑ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

ORIGIN ID:HOBA (303) 941-6156
GHD
998 W 6TH AVE STE 800
OLDEN, CO 80401
NITED STATES US

SHIP DATE: 16SEP20
ACTWGT: 47.50 LB
CAD: 6994246/SSFE2110
DIMS: 24x14x13 IN

BILL THIRD PARTY

Part # 156297-486 RRDB EXP 06/21

DHL

2300 DOUBLE CREEK DR

ROUND ROCK TX 78664

(512) 388-8222 REF: 11211520
INV:
PO: DEPT:

FedEx
Express

1 of 2

TRK# 0201 3968 9466 4718

MASTER

A8 BSMA

THU - 17 SEP 10:30A
PRIORITY OVERNIGHT

78664
TX-US AUS

RT 712

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 9/17/2020

Work Order Number 2009128 Received by: RA

Checklist completed by: _____ 9/17/2020 Reviewed by _____ 9/17/2020
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping 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 ☐	3.3 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? no		Checked by EL
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:** *24-Sep-20*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2009128

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, EPA and Standard Methods.

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

DHL Analytical, Inc.

Date: *24-Sep-20*

CLIENT:	GHD	**Client Sample ID:**	MW-3
Project:	Hobbs Tank	**Lab ID:**	2009128-01
Project No:	11211520-02-01	**Collection Date:**	09/16/20 10:15 AM
Lab Order:	2009128	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.222	0.148	0.185		mg/L	1	09/22/20 01:39 PM
Surr: Isopropylbenzene	72.9	0	47-142		%REC	1	09/22/20 01:39 PM
Surr: Octacosane	100	0	51-124		%REC	1	09/22/20 01:39 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	09/22/20 07:02 PM
Surr: Tetrachlorethene	73.7	0	74-138		%REC	1	09/22/20 07:02 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00748	0.00200	0.00500		mg/L	1	09/21/20 03:26 PM
Barium	0.184	0.00300	0.0100		mg/L	1	09/21/20 03:26 PM
Cadmium	0.000331	0.000300	0.00100	J	mg/L	1	09/21/20 03:26 PM
Chromium	0.00572	0.00200	0.00500		mg/L	1	09/21/20 03:26 PM
Lead	0.00124	0.000300	0.00100		mg/L	1	09/21/20 03:26 PM
Selenium	0.00216	0.00200	0.00500	J	mg/L	1	09/21/20 03:26 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	09/21/20 03:26 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	09/21/20 01:15 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 09:15 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 09:15 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 09:15 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 09:15 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 09:15 PM
Surr: 1,2-Dichloroethane-d4	104	0	72-119		%REC	1	09/17/20 09:15 PM
Surr: 4-Bromofluorobenzene	100	0	76-119		%REC	1	09/17/20 09:15 PM
Surr: Dibromofluoromethane	92.7	0	85-115		%REC	1	09/17/20 09:15 PM
Surr: Toluene-d8	98.6	0	81-120		%REC	1	09/17/20 09:15 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	109	3.00	10.0		mg/L	10	09/17/20 07:41 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	911	10.0	10.0		mg/L	1	09/18/20 04:30 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: *24-Sep-20*

CLIENT:	GHD	**Client Sample ID:**	MW-4
Project:	Hobbs Tank	**Lab ID:**	2009128-02
Project No:	11211520-02-01	**Collection Date:**	09/16/20 11:00 AM
Lab Order:	2009128	**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	09/22/20 01:48 PM
Surr: Isopropylbenzene	70.7	0	47-142		%REC	1	09/22/20 01:48 PM
Surr: Octacosane	88.3	0	51-124		%REC	1	09/22/20 01:48 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	09/23/20 01:41 PM
Surr: Tetrachlorethene	122	0	74-138		%REC	1	09/23/20 01:41 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.0200	0.00200	0.00500		mg/L	1	09/21/20 03:28 PM
Barium	0.234	0.00300	0.0100		mg/L	1	09/21/20 03:28 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	09/21/20 03:28 PM
Chromium	0.0151	0.00200	0.00500		mg/L	1	09/21/20 03:28 PM
Lead	0.00518	0.000300	0.00100		mg/L	1	09/21/20 03:28 PM
Selenium	0.0223	0.00200	0.00500		mg/L	1	09/21/20 03:28 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	09/21/20 03:28 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	09/21/20 01:17 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 09:39 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 09:39 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 09:39 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 09:39 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 09:39 PM
Surr: 1,2-Dichloroethane-d4	104	0	72-119		%REC	1	09/17/20 09:39 PM
Surr: 4-Bromofluorobenzene	99.6	0	76-119		%REC	1	09/17/20 09:39 PM
Surr: Dibromofluoromethane	93.6	0	85-115		%REC	1	09/17/20 09:39 PM
Surr: Toluene-d8	97.9	0	81-120		%REC	1	09/17/20 09:39 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	27.6	3.00	10.0		mg/L	10	09/17/20 07:57 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	635	10.0	10.0		mg/L	1	09/18/20 04:30 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: *24-Sep-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5
Project:	Hobbs Tank	**Lab ID:**	2009128-03
Project No:	11211520-02-01	**Collection Date:**	09/16/20 11:20 AM
Lab Order:	2009128	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.156	0.147	0.183	J	mg/L	1	09/22/20 01:58 PM
Surr: Isopropylbenzene	48.8	0	47-142		%REC	1	09/22/20 01:58 PM
Surr: Octacosane	82.8	0	51-124		%REC	1	09/22/20 01:58 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	09/22/20 07:50 PM
Surr: Tetrachlorethene	103	0	74-138		%REC	1	09/22/20 07:50 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00678	0.00200	0.00500		mg/L	1	09/21/20 03:30 PM
Barium	0.273	0.00300	0.0100		mg/L	1	09/21/20 03:30 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	09/21/20 03:30 PM
Chromium	0.00591	0.00200	0.00500		mg/L	1	09/21/20 03:30 PM
Lead	0.00127	0.000300	0.00100		mg/L	1	09/21/20 03:30 PM
Selenium	0.00357	0.00200	0.00500	J	mg/L	1	09/21/20 03:30 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	09/21/20 03:30 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	09/21/20 01:20 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 10:03 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 10:03 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 10:03 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 10:03 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 10:03 PM
Surr: 1,2-Dichloroethane-d4	105	0	72-119		%REC	1	09/17/20 10:03 PM
Surr: 4-Bromofluorobenzene	100	0	76-119		%REC	1	09/17/20 10:03 PM
Surr: Dibromofluoromethane	93.3	0	85-115		%REC	1	09/17/20 10:03 PM
Surr: Toluene-d8	98.1	0	81-120		%REC	1	09/17/20 10:03 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	104	3.00	10.0		mg/L	10	09/17/20 08:13 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	702	10.0	10.0		mg/L	1	09/18/20 04:30 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: *24-Sep-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5D
Project:	Hobbs Tank	**Lab ID:**	2009128-04
Project No:	11211520-02-01	**Collection Date:**	09/16/20 11:20 AM
Lab Order:	2009128	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.173	0.148	0.186	J	mg/L	1	09/22/20 02:07 PM
Surr: Isopropylbenzene	67.5	0	47-142		%REC	1	09/22/20 02:07 PM
Surr: Octacosane	106	0	51-124		%REC	1	09/22/20 02:07 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	09/23/20 02:05 PM
Surr: Tetrachlorethene	124	0	74-138		%REC	1	09/23/20 02:05 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00776	0.00200	0.00500		mg/L	1	09/21/20 03:32 PM
Barium	0.333	0.00300	0.0100		mg/L	1	09/21/20 03:32 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	09/21/20 03:32 PM
Chromium	0.00883	0.00200	0.00500		mg/L	1	09/21/20 03:32 PM
Lead	0.00194	0.000300	0.00100		mg/L	1	09/21/20 03:32 PM
Selenium	0.00432	0.00200	0.00500	J	mg/L	1	09/21/20 03:32 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	09/21/20 03:32 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	09/21/20 01:22 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 10:27 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 10:27 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 10:27 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 10:27 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 10:27 PM
Surr: 1,2-Dichloroethane-d4	105	0	72-119		%REC	1	09/17/20 10:27 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	09/17/20 10:27 PM
Surr: Dibromofluoromethane	94.4	0	85-115		%REC	1	09/17/20 10:27 PM
Surr: Toluene-d8	98.2	0	81-120		%REC	1	09/17/20 10:27 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	92.7	3.00	10.0		mg/L	10	09/17/20 08:29 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	704	10.0	10.0		mg/L	1	09/18/20 04:30 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: *24-Sep-20*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2009128-05
Project No:	11211520-02-01	**Collection Date:**	09/16/20 11:45 AM
Lab Order:	2009128	**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	0.187		mg/L	1	09/22/20 02:16 PM
Surr: Isopropylbenzene	60.5	0	47-142		%REC	1	09/22/20 02:16 PM
Surr: Octacosane	75.8	0	51-124		%REC	1	09/22/20 02:16 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	0.308	0.0600	0.100		mg/L	1	09/22/20 08:37 PM
Surr: Tetrachlorethene	122	0	74-138		%REC	1	09/22/20 08:37 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Arsenic	0.00717	0.00200	0.00500		mg/L	1	09/21/20 03:34 PM
Barium	0.112	0.00300	0.0100		mg/L	1	09/21/20 03:34 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	09/21/20 03:34 PM
Chromium	0.00966	0.00200	0.00500		mg/L	1	09/21/20 03:34 PM
Lead	0.000312	0.000300	0.00100	J	mg/L	1	09/21/20 03:34 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	09/21/20 03:34 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	09/21/20 03:34 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **BM**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	09/21/20 01:24 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	0.135	0.000300	0.00100		mg/L	1	09/17/20 10:51 PM
Ethylbenzene	0.000382	0.000300	0.00100	J	mg/L	1	09/17/20 10:51 PM
m,p-Xylene	0.00550	0.000600	0.00200		mg/L	1	09/17/20 10:51 PM
o-Xylene	0.00436	0.000300	0.00100		mg/L	1	09/17/20 10:51 PM
Toluene	0.00731	0.000600	0.00200		mg/L	1	09/17/20 10:51 PM
Surr: 1,2-Dichloroethane-d4	105	0	72-119		%REC	1	09/17/20 10:51 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	09/17/20 10:51 PM
Surr: Dibromofluoromethane	93.5	0	85-115		%REC	1	09/17/20 10:51 PM
Surr: Toluene-d8	98.0	0	81-120		%REC	1	09/17/20 10:51 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	61.9	3.00	10.0		mg/L	10	09/17/20 08:45 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	539	10.0	10.0		mg/L	1	09/18/20 04:30 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: *24-Sep-20*

CLIENT:	GHD	**Client Sample ID:**	Trip
Project:	Hobbs Tank	**Lab ID:**	2009128-06
Project No:	11211520-02-01	**Collection Date:**	09/16/20
Lab Order:	2009128	**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	09/23/20 01:17 PM
Surr: Tetrachlorethene	124	0	74-138		%REC	1	09/23/20 01:17 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **CC**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 04:28 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 04:28 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 04:28 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	09/17/20 04:28 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	09/17/20 04:28 PM
Surr: 1,2-Dichloroethane-d4	108	0	72-119		%REC	1	09/17/20 04:28 PM
Surr: 4-Bromofluorobenzene	100	0	76-119		%REC	1	09/17/20 04:28 PM
Surr: Dibromofluoromethane	94.3	0	85-115		%REC	1	09/17/20 04:28 PM
Surr: Toluene-d8	98.0	0	81-120		%REC	1	09/17/20 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:** *24-Sep-20*

CLIENT: GHD
Work Order: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_200922A

The QC data in batch 97960 applies to the following samples: 2009128-01E, 2009128-02E, 2009128-03E, 2009128-04E, 2009128-05E

Sample ID: **MB-97960** Batch ID: **97960** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_200922A** Analysis Date: **9/22/2020 11:14:09 AM** Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0576		0.1000		57.6	47	142			
Surr: Octacosane	0.0876		0.1000		87.6	51	124			

Sample ID: **LCS-97960** Batch ID: **97960** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_200922A** Analysis Date: **9/22/2020 11:23:13 AM** Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.995	0.100	1.250	0	79.6	50	114			
Surr: Isopropylbenzene	0.0589		0.1000		58.9	47	142			
Surr: Octacosane	0.0866		0.1000		86.6	51	124			

Sample ID: **LCSD-97960** Batch ID: **97960** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_200922A** Analysis Date: **9/22/2020 11:32:16 AM** Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.972	0.100	1.250	0	77.7	50	114	2.42	30	
Surr: Isopropylbenzene	0.0496		0.1000		49.6	47	142	0	0	
Surr: Octacosane	0.0861		0.1000		86.1	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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_200922A

The QC data in batch 97969 applies to the following samples: 2009128-01B, 2009128-02B, 2009128-03B, 2009128-04B, 2009128-05B, 2009128-06B

Sample ID: **LCS-97969** Batch ID: **97969** TestNo: **M8015V** Units: **mg/L**
SampType: **LCS** Run ID: **GC4_200922A** Analysis Date: **9/22/2020 10:35:59 AM** Prep Date: **9/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.46	0.100	2.500	0	98.3	67	136			
Surr: Tetrachlorethene	0.386		0.4000		96.6	74	138			

Sample ID: **LCSD-97969** Batch ID: **97969** TestNo: **M8015V** Units: **mg/L**
SampType: **LCSD** Run ID: **GC4_200922A** Analysis Date: **9/22/2020 10:59:48 AM** Prep Date: **9/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.57	0.100	2.500	0	103	67	136	4.56	30	
Surr: Tetrachlorethene	0.420		0.4000		105	74	138	0	0	

Sample ID: **MB-97969** Batch ID: **97969** TestNo: **M8015V** Units: **mg/L**
SampType: **MBLK** Run ID: **GC4_200922A** Analysis Date: **9/22/2020 12:11:13 PM** Prep Date: **9/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.510		0.4000		127	74	138			

Sample ID: **2009113-01BMS** Batch ID: **97969** TestNo: **M8015V** Units: **mg/L**
SampType: **MS** Run ID: **GC4_200922A** Analysis Date: **9/22/2020 9:01:05 PM** Prep Date: **9/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.32	0.100	2.500	0	92.8	67	136			
Surr: Tetrachlorethene	0.412		0.4000		103	74	138			

Sample ID: **2009113-01BMSD** Batch ID: **97969** TestNo: **M8015V** Units: **mg/L**
SampType: **MSD** Run ID: **GC4_200922A** Analysis Date: **9/22/2020 9:24:37 PM** Prep Date: **9/22/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.45	0.100	2.500	0	97.9	67	136	5.36	30	
Surr: Tetrachlorethene	0.401		0.4000		100	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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_200923A

The QC data in batch 97983 applies to the following samples: 2009128-02B, 2009128-04B, 2009128-06B

Sample ID: **LCS-97983**	Batch ID: **97983**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCS**	Run ID: **GC4_200923A**	Analysis Date: **9/23/2020 11:17:56 AM**	Prep Date: **9/23/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.74	0.100	2.500	0	110	67	136			
Surr: Tetrachlorethene	0.458		0.4000		115	74	138			

Sample ID: **LCSD-97983**	Batch ID: **97983**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCSD**	Run ID: **GC4_200923A**	Analysis Date: **9/23/2020 11:42:50 AM**	Prep Date: **9/23/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.69	0.100	2.500	0	107	67	136	2.07	30	
Surr: Tetrachlorethene	0.439		0.4000		110	74	138	0	0	

Sample ID: **MB-97983**	Batch ID: **97983**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MBLK**	Run ID: **GC4_200923A**	Analysis Date: **9/23/2020 12:29:53 PM**	Prep Date: **9/23/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.486		0.4000		122	74	138			

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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_200921A

The QC data in batch 97959 applies to the following samples: 2009128-01C, 2009128-02C, 2009128-03C, 2009128-04C, 2009128-05C

Sample ID: **MB-97959**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MBLK**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:25:46 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-97959**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCS**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:30:18 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00191	0.000200	0.00200	0	95.5	85	115			

Sample ID: **LCSD-97959**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCSD**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:32:35 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00193	0.000200	0.00200	0	96.5	85	115	1.04	15	

Sample ID: **2009092-01C MS**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MS**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:37:07 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00945	0.00100	0.0100	0	94.5	80	120			

Sample ID: **2009092-01C MSD**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MSD**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:39:22 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00980	0.00100	0.0100	0	98.0	80	120	3.64	15	

Sample ID: **2009092-01C SD**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **SD**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:41:38 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.00200	0.00500	0	0				0	10	

Sample ID: **2009092-01C PDS**	Batch ID: **97959**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **PDS**	Run ID: **CETAC2_HG_200921A**	Analysis Date: **9/21/2020 12:43:54 PM**	Prep Date: **9/21/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0112	0.00100	0.0125	0	90.0	85	115			

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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_200921C

The QC data in batch 97941 applies to the following samples: 2009128-01C, 2009128-02C, 2009128-03C, 2009128-04C, 2009128-05C

Sample ID: **MB-97941** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:03:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00500								
Lead	<0.000300	0.00100								
Selenium	<0.00200	0.00500								
Silver	<0.00100	0.00200								

Sample ID: **LCS-97941** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:05:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.199	0.00500	0.200	0	99.3	80	120			
Barium	0.200	0.0100	0.200	0	99.8	80	120			
Cadmium	0.202	0.00100	0.200	0	101	80	120			
Chromium	0.206	0.00500	0.200	0	103	80	120			
Lead	0.196	0.00100	0.200	0	97.8	80	120			
Selenium	0.191	0.00500	0.200	0	95.5	80	120			
Silver	0.204	0.00200	0.200	0	102	80	120			

Sample ID: **LCSD-97941** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:07:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.200	0.00500	0.200	0	100	80	120	0.851	15	
Barium	0.201	0.0100	0.200	0	100	80	120	0.701	15	
Cadmium	0.203	0.00100	0.200	0	102	80	120	0.729	15	
Chromium	0.207	0.00500	0.200	0	104	80	120	0.344	15	
Lead	0.199	0.00100	0.200	0	99.4	80	120	1.71	15	
Selenium	0.197	0.00500	0.200	0	98.6	80	120	3.17	15	
Silver	0.208	0.00200	0.200	0	104	80	120	1.52	15	

Sample ID: **2009109-03B SD** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:17:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.0100	0.0250	0	0				0	20	
Barium	0.0172	0.0500	0	0.0171				0.829	20	
Cadmium	<0.00150	0.00500	0	0				0	20	
Chromium	<0.0100	0.0250	0	0				0	20	

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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_200921C

Sample ID: **2009109-03B SD** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:17:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	<0.00150	0.00500	0	0				0	20	
Selenium	<0.0100	0.0250	0	0				0	20	
Silver	<0.00500	0.0100	0	0				0	20	

Sample ID: **2009109-03B PDS** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:41:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00500	0.200	0	102	75	125			
Barium	0.218	0.0100	0.200	0.0171	100	75	125			
Cadmium	0.192	0.00100	0.200	0	96.1	75	125			
Chromium	0.205	0.00500	0.200	0	103	75	125			
Lead	0.202	0.00100	0.200	0	101	75	125			
Selenium	0.215	0.00500	0.200	0	108	75	125			
Silver	0.188	0.00200	0.200	0	93.8	75	125			

Sample ID: **2009109-03B MS** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:43:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.205	0.00500	0.200	0	103	75	125			
Barium	0.207	0.0100	0.200	0.0171	95.1	75	125			
Cadmium	0.188	0.00100	0.200	0	93.9	75	125			
Chromium	0.194	0.00500	0.200	0	96.8	75	125			
Lead	0.194	0.00100	0.200	0	97.0	75	125			
Selenium	0.211	0.00500	0.200	0	105	75	125			
Silver	0.185	0.00200	0.200	0	92.5	75	125			

Sample ID: **2009109-03B MSD** Batch ID: **97941** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS4_200921C** Analysis Date: **9/21/2020 4:45:00 PM** Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00500	0.200	0	102	75	125	0.408	15	
Barium	0.205	0.0100	0.200	0.0171	93.9	75	125	1.10	15	
Cadmium	0.187	0.00100	0.200	0	93.3	75	125	0.663	15	
Chromium	0.194	0.00500	0.200	0	96.9	75	125	0.056	15	
Lead	0.194	0.00100	0.200	0	96.9	75	125	0.051	15	
Selenium	0.206	0.00500	0.200	0	103	75	125	2.19	15	
Silver	0.186	0.00200	0.200	0	92.8	75	125	0.279	15	

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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_200917B

The QC data in batch 97940 applies to the following samples: 2009128-01A, 2009128-02A, 2009128-03A, 2009128-04A, 2009128-05A, 2009128-06A

Sample ID: **LCS-97940** Batch ID: **97940** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS5_200917B** Analysis Date: **9/17/2020 1:06:00 PM** Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0266	0.00100	0.0232	0	115	81	122			
Ethylbenzene	0.0248	0.00100	0.0232	0	107	80	120			
m,p-Xylene	0.0495	0.00200	0.0464	0	107	80	120			
o-Xylene	0.0241	0.00100	0.0232	0	104	80	120			
Toluene	0.0257	0.00200	0.0232	0	111	80	120			
Surr: 1,2-Dichloroethane-d4	203		200.0		101	72	119			
Surr: 4-Bromofluorobenzene	196		200.0		98.1	76	119			
Surr: Dibromofluoromethane	188		200.0		94.0	85	115			
Surr: Toluene-d8	191		200.0		95.7	81	120			

Sample ID: **LCSD-97940** Batch ID: **97940** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCSD** Run ID: **GCMS5_200917B** Analysis Date: **9/17/2020 1:30:00 PM** Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0283	0.00100	0.0232	0	122	81	122	6.32	20	
Ethylbenzene	0.0263	0.00100	0.0232	0	113	80	120	5.85	20	
m,p-Xylene	0.0528	0.00200	0.0464	0	114	80	120	6.49	20	
o-Xylene	0.0259	0.00100	0.0232	0	112	80	120	7.47	20	
Toluene	0.0275	0.00200	0.0232	0	118	80	120	6.64	20	
Surr: 1,2-Dichloroethane-d4	200		200.0		100	72	119	0	0	
Surr: 4-Bromofluorobenzene	195		200.0		97.4	76	119	0	0	
Surr: Dibromofluoromethane	188		200.0		94.0	85	115	0	0	
Surr: Toluene-d8	192		200.0		96.1	81	120	0	0	

Sample ID: **MB-97940** Batch ID: **97940** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS5_200917B** Analysis Date: **9/17/2020 2:18:00 PM** Prep Date: **9/17/2020**

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	206		200.0		103	72	119			
Surr: 4-Bromofluorobenzene	202		200.0		101	76	119			
Surr: Dibromofluoromethane	186		200.0		92.8	85	115			
Surr: Toluene-d8	195		200.0		97.7	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

CLIENT: GHD
Work Order: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_200917A

The QC data in batch 97927 applies to the following samples: 2009128-01D, 2009128-02D, 2009128-03D, 2009128-04D, 2009128-05D

Sample ID: **MB-97927**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **MBLK**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 11:47:17 AM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								

Sample ID: **LCS-97927**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **LCS**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 12:03:17 PM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.4	1.00	10.00	0	104	90	110			

Sample ID: **LCSD-97927**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **LCSD**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 12:19:17 PM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	1.00	10.00	0	105	90	110	0.368	20	

Sample ID: **2009113-01DMS**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 9:01:05 PM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	326	10.0	200.0	117.5	104	90	110			

Sample ID: **2009113-01DMSD**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 9:17:05 PM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	323	10.0	200.0	117.5	103	90	110	0.718	20	

Sample ID: **2009113-02DMS**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 9:33:05 PM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	493	10.0	200.0	310.8	91.1	90	110			

Sample ID: **2009113-02DMSD**	Batch ID: **97927**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_200917A**	Analysis Date: **9/17/2020 9:49:05 PM**	Prep Date: **9/17/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	491	10.0	200.0	310.8	90.2	90	110	0.368	20	

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: 2009128
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: WC_200918D

The QC data in batch 97945 applies to the following samples: 2009128-01D, 2009128-02D, 2009128-03D, 2009128-04D, 2009128-05D

Sample ID: **MB-97945**	Batch ID: **97945**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_200918D**	Analysis Date: **9/18/2020 4:30:00 PM**	Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-97945**	Batch ID: **97945**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_200918D**	Analysis Date: **9/18/2020 4:30:00 PM**	Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	763	10.0	745.6	0	102	90	113			

Sample ID: **2009114-01A-DUP**	Batch ID: **97945**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_200918D**	Analysis Date: **9/18/2020 4:30:00 PM**	Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	970	10.0	0	969.0				0.103	5	

Sample ID: **2009114-02A-DUP**	Batch ID: **97945**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_200918D**	Analysis Date: **9/18/2020 4:30:00 PM**	Prep Date: **9/18/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	815	10.0	0	811.0				0.492	5	

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

DHL ANALYTICAL

December 10, 2020

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

Order No.: 2012024

RE: Hobbs Tank

Dear Brad Stephenson:

DHL Analytical, Inc. received 5 sample(s) on 12/3/2020 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: T104704211-20-25

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

№ 69390

CHAIN-OF-CUSTODY

CLIENT: GHD
ADDRESS: 14988 W 6TH AVE #800 GOLDEN, CO 80403
PHONE: 303 941 6156 FAX/E-MAIL: CEGAP@Q.COM
DATA REPORTED TO: BSTEPHENSON
ADDITIONAL REPORT COPIES TO: J CLOVER

DATE: 12/2/20 PAGE 1 OF 1
PO #: DHL WORK ORDER #: 2012 ~~02~~ 024 @ 12/3/20
PROJECT LOCATION OR NAME: HOBBS TANK
CLENT PROJECT #: 112 11520 COLLECTOR: BSTEPHENSON

Authorize 5% surcharge for TRRP Report? ❑ Yes ❑ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT
P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl | HNO_3 | H_2SO_4 ❑ NaOH ❑ | ICE | UNPRESERVED

ANALYSES: BTEX ❑ MTBE ❑ (METHOD 8021) | TPH 1005 ❑ TPH 1006 ❑ HOLD 1006 ❑ | GRO (METHOD 8015) ❑ DRO (METHOD 8015) ❑ | VOC 8260 ❑ VOC 624 ❑ VOC 8260/5035 ❑ | SVOC 8270 ❑ PAH 8270 ❑ HOLD PAH ❑ SVOC 625 ❑ | 8270 PEST ❑ 625 PEST/PCB ❑ 608 PCB ❑ | 8270 O-P PEST ❑ 8082 PCB ❑ 8270 PCB ❑ | 8321 HERB ❑ T PHOS, AMMONIA ❑ | METALS 6020 ❑ METALS 200.8 ❑ DISS. METALS ❑ | RCRA ~~X~~ TX11 ❑ | PH ❑ HEX CHROM ❑ ALKALINITY ❑ COD ❑ | CHLORIDE ~~X~~ ANIONS ❑ | TCLP-SVOC ❑ VOC ❑ PEST ❑ HERB ❑ | TCLP-METALS ❑ RCRA 8 ❑ TX-11 ❑ Pb ❑ | RCI ❑ FLASHPOINT ❑ DGAS ❑ | TDS ~~X~~ TSS ❑ % MOISTURE ❑ CYANIDE ❑

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
MW-3	01	12/2/20	0800	W		6+						X X ~~X~~ GRO	
MW-4	02	"	0900	W		10						X X X X X	
MW-5	03	"	0930	W		10						X X X X X	
HTRW-1	04	"	1000	W		10						X X X X X	Rec Brad S. 12/2/20
TRIP	05	12/2/20	—	W		2						X GRO	

RELINQUISHED BY: (Signature) DATE/TIME: 12/2/20 1600 RECEIVED BY: (Signature) to FED EX
RELINQUISHED BY: (Signature) DATE/TIME: 12/3/20 1119 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

❑ DHL DISPOSAL @ $5.00 each ❑ Return

TURN AROUND TIME
RUSH ❑ CALL FIRST
1 DAY ❑ CALL FIRST
2 DAY ❑
NORMAL ❑
OTHER ❑

LABORATORY USE ONLY:
RECEIVING TEMP: 3.4°C THERM #: 78
CUSTODY SEALS: ❑ BROKEN ❑ INTACT ☒ NOT USED
CARRIER: ❑ LONE STAR ☒ FEDEX ❑ UPS ❑ OTHER
❑ COURIER DELIVERY
❑ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

ORIGIN ID:HOBA (303) 941-6156
BRAD STEVENSON

14998 W 6TH AVE STE 800

GOLDEN, CO 80401
UNITED STATES US

SHIP DATE: 02DEC20
ACTWGT: 39.35 LB
CAD: 6994246/SSFE2121
DIMS: 24x14x14 IN

BILL THIRD PARTY

Part # 156297-435 RRDB EXP 06/21

TO

DHL ANALYSTICS
2300 DOUBLE CREEK DR

ROUND ROCK TX 78664

(512) 388-8222 REF:
INV:
PO: DEPT:

FedEx Express

E

J2020200714D1uv

2 of 4

MPS# 0263 **3997 5463 6320**

Mstr# 3997 5463 6310 0201

THU - 03 DEC 10:30A
PRIORITY OVERNIGHT

A8 BSMA

78664
TX-US **AUS**

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GHD Date Received: 12/3/2020

Work Order Number 2012024 Received by: EL

Checklist completed by: EL 12/3/2020 Reviewed by DL 12/3/2020
Signature | Date | Initials | Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping 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 ☐	3.4 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? no		Checked by EL
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: 12/3/20 Person contacted Brad S.

Contacted by: Eric L. Regarding: Broken TBs.

Comments: One vial received intact for the Trip Blank sample.

Corrective Action: Per Brad, proceed with BTEX analysis on intact vial.

DHL Analytical, Inc. **Date:** *10-Dec-20*

CLIENT: GHD
Project: Hobbs Tank
Lab Order: 2012024

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, E300 and Standard Methods.

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

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

DHL Analytical, Inc.

Date: *10-Dec-20*

CLIENT:	GHD	**Client Sample ID:**	MW-3
Project:	Hobbs Tank	**Lab ID:**	2012024-01
Project No:	11211520	**Collection Date:**	12/02/20 08:00 AM
Lab Order:	2012024	**Matrix:**	AQUEOUS

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	12/08/20 01:19 PM
Surr: Tetrachlorethene	104	0	74-138		%REC	1	12/08/20 01:19 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:01 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:01 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 06:01 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:01 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 06:01 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	1	12/04/20 06:01 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	12/04/20 06:01 PM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	12/04/20 06:01 PM
Surr: Toluene-d8	95.7	0	81-120		%REC	1	12/04/20 06:01 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: *10-Dec-20*

CLIENT:	GHD	**Client Sample ID:**	MW-4
Project:	Hobbs Tank	**Lab ID:**	2012024-02
Project No:	11211520	**Collection Date:**	12/02/20 09:00 AM
Lab Order:	2012024	**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	0.188		mg/L	1	12/08/20 10:24 AM
Surr: Isopropylbenzene	62.2	0	47-142		%REC	1	12/08/20 10:24 AM
Surr: Octacosane	84.8	0	51-124		%REC	1	12/08/20 10:24 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/08/20 01:44 PM
Surr: Tetrachlorethene	107	0	74-138		%REC	1	12/08/20 01:44 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.0153	0.00200	0.00500		mg/L	1	12/08/20 03:40 PM
Barium	0.173	0.00300	0.0100		mg/L	1	12/08/20 03:40 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	12/08/20 03:40 PM
Chromium	0.00878	0.00200	0.00500		mg/L	1	12/08/20 03:40 PM
Lead	0.00280	0.000300	0.00100		mg/L	1	12/08/20 03:40 PM
Selenium	0.0166	0.00200	0.00500		mg/L	1	12/08/20 03:40 PM
Silver	<0.00100	0.00100	0.00200		mg/L	1	12/08/20 03:40 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	12/09/20 01:18 PM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:26 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:26 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 06:26 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:26 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 06:26 PM
Surr: 1,2-Dichloroethane-d4	110	0	72-119		%REC	1	12/04/20 06:26 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	12/04/20 06:26 PM
Surr: Dibromofluoromethane	103	0	85-115		%REC	1	12/04/20 06:26 PM
Surr: Toluene-d8	96.7	0	81-120		%REC	1	12/04/20 06:26 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	20.5	3.00	10.0		mg/L	10	12/07/20 01:37 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	573	10.0	10.0		mg/L	1	12/07/20 05:30 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: *10-Dec-20*

CLIENT:	GHD	**Client Sample ID:**	MW-5
Project:	Hobbs Tank	**Lab ID:**	2012024-03
Project No:	11211520	**Collection Date:**	12/02/20 09:30 AM
Lab Order:	2012024	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.178	0.148	0.185	J	mg/L	1	12/08/20 10:33 AM
Surr: Isopropylbenzene	51.7	0	47-142		%REC	1	12/08/20 10:33 AM
Surr: Octacosane	98.8	0	51-124		%REC	1	12/08/20 10:33 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	12/08/20 02:09 PM
Surr: Tetrachlorethene	108	0	74-138		%REC	1	12/08/20 02:09 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.00586	0.00200	0.00500		mg/L	1	12/07/20 11:05 AM
Barium	0.162	0.00300	0.0100		mg/L	1	12/07/20 11:05 AM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	12/07/20 11:05 AM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	12/07/20 11:05 AM
Lead	0.000830	0.000300	0.00100	J	mg/L	1	12/07/20 11:05 AM
Selenium	0.00373	0.00200	0.00500	J	mg/L	1	12/07/20 11:05 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	12/07/20 11:05 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	12/09/20 11:29 AM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:51 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:51 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 06:51 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 06:51 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 06:51 PM
Surr: 1,2-Dichloroethane-d4	109	0	72-119		%REC	1	12/04/20 06:51 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	12/04/20 06:51 PM
Surr: Dibromofluoromethane	100	0	85-115		%REC	1	12/04/20 06:51 PM
Surr: Toluene-d8	95.8	0	81-120		%REC	1	12/04/20 06:51 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	86.6	3.00	10.0		mg/L	10	12/09/20 04:10 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	723	10.0	10.0		mg/L	1	12/04/20 03:30 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: *10-Dec-20*

CLIENT:	GHD	**Client Sample ID:**	HTRW-1
Project:	Hobbs Tank	**Lab ID:**	2012024-04
Project No:	11211520	**Collection Date:**	12/02/20 10:00 AM
Lab Order:	2012024	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	0.256	0.150	0.188		mg/L	1	12/08/20 10:42 AM
Surr: Isopropylbenzene	72.0	0	47-142		%REC	1	12/08/20 10:42 AM
Surr: Octacosane	82.2	0	51-124		%REC	1	12/08/20 10:42 AM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	1.79	0.0600	0.100		mg/L	1	12/08/20 02:35 PM
Surr: Tetrachlorethene	104	0	74-138		%REC	1	12/08/20 02:35 PM
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **SP**
Arsenic	0.00867	0.00200	0.00500		mg/L	1	12/07/20 11:07 AM
Barium	0.135	0.00300	0.0100		mg/L	1	12/07/20 11:07 AM
Cadmium	0.000455	0.000300	0.00100	J	mg/L	1	12/07/20 11:07 AM
Chromium	0.0117	0.00200	0.00500		mg/L	1	12/07/20 11:07 AM
Lead	0.00654	0.000300	0.00100		mg/L	1	12/07/20 11:07 AM
Selenium	0.00348	0.00200	0.00500	J	mg/L	1	12/07/20 11:07 AM
Silver	<0.00100	0.00100	0.00200		mg/L	1	12/07/20 11:07 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	12/09/20 11:32 AM
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	0.626	0.00600	0.0200		mg/L	20	12/07/20 04:28 PM
Ethylbenzene	0.00229	0.000300	0.00100		mg/L	1	12/04/20 11:48 PM
m,p-Xylene	0.0278	0.000600	0.00200		mg/L	1	12/04/20 11:48 PM
o-Xylene	0.0382	0.000300	0.00100		mg/L	1	12/04/20 11:48 PM
Toluene	0.0533	0.000600	0.00200		mg/L	1	12/04/20 11:48 PM
Surr: 1,2-Dichloroethane-d4	105	0	72-119		%REC	1	12/04/20 11:48 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	20	12/07/20 04:28 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	12/04/20 11:48 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	20	12/07/20 04:28 PM
Surr: Dibromofluoromethane	97.7	0	85-115		%REC	1	12/04/20 11:48 PM
Surr: Dibromofluoromethane	102	0	85-115		%REC	20	12/07/20 04:28 PM
Surr: Toluene-d8	97.4	0	81-120		%REC	1	12/04/20 11:48 PM
Surr: Toluene-d8	94.8	0	81-120		%REC	20	12/07/20 04:28 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	72.5	3.00	10.0		mg/L	10	12/07/20 02:41 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	466	10.0	10.0		mg/L	1	12/04/20 03:30 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: *10-Dec-20*

CLIENT:	GHD	**Client Sample ID:**	Trip
Project:	Hobbs Tank	**Lab ID:**	2012024-05
Project No:	11211520	**Collection Date:**	12/02/20
Lab Order:	2012024	**Matrix:**	TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 04:47 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 04:47 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 04:47 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	12/04/20 04:47 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	12/04/20 04:47 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	1	12/04/20 04:47 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	12/04/20 04:47 PM
Surr: Dibromofluoromethane	99.7	0	85-115		%REC	1	12/04/20 04:47 PM
Surr: Toluene-d8	96.2	0	81-120		%REC	1	12/04/20 04:47 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:** *10-Dec-20*

CLIENT: GHD
Work Order: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_201208A

The QC data in batch 98775 applies to the following samples: 2012024-02E, 2012024-03E, 2012024-04E

Sample ID: **MB-98775** Batch ID: **98775** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_201208A** Analysis Date: **12/8/2020 9:57:24 AM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0586		0.1000		58.6	47	142			
Surr: Octacosane	0.0812		0.1000		81.2	51	124			

Sample ID: **LCS-98775** Batch ID: **98775** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_201208A** Analysis Date: **12/8/2020 10:06:28 AM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.882	0.100	1.250	0	70.5	50	114			
Surr: Isopropylbenzene	0.0612		0.1000		61.2	47	142			
Surr: Octacosane	0.0827		0.1000		82.7	51	124			

Sample ID: **LCSD-98775** Batch ID: **98775** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_201208A** Analysis Date: **12/8/2020 10:15:32 AM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.884	0.100	1.250	0	70.8	50	114	0.325	30	
Surr: Isopropylbenzene	0.0538		0.1000		53.8	47	142	0	0	
Surr: Octacosane	0.0857		0.1000		85.7	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	Page 1 of 16
	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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_201208A

The QC data in batch 98791 applies to the following samples: 2012024-01B, 2012024-02B, 2012024-03B, 2012024-04B

Sample ID: **LCS-98791**	Batch ID: **98791**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCS**	Run ID: **GC4_201208A**	Analysis Date: **12/8/2020 10:50:14 AM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.82	0.100	2.500	0	113	67	136			
Surr: Tetrachlorethene	0.395		0.4000		98.7	74	138			

Sample ID: **LCSD-98791**	Batch ID: **98791**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCSD**	Run ID: **GC4_201208A**	Analysis Date: **12/8/2020 11:15:07 AM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.91	0.100	2.500	0	116	67	136	2.96	30	
Surr: Tetrachlorethene	0.414		0.4000		103	74	138	0	0	

Sample ID: **MB-98791**	Batch ID: **98791**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MBLK**	Run ID: **GC4_201208A**	Analysis Date: **12/8/2020 12:29:07 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.421		0.4000		105	74	138			

Sample ID: **2012026-06BMS**	Batch ID: **98791**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MS**	Run ID: **GC4_201208A**	Analysis Date: **12/8/2020 8:34:31 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.83	0.100	2.500	0	113	67	136			
Surr: Tetrachlorethene	0.431		0.4000		108	74	138			

Sample ID: **2012026-06BMSD**	Batch ID: **98791**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MSD**	Run ID: **GC4_201208A**	Analysis Date: **12/8/2020 8:57:59 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.91	0.100	2.500	0	117	67	136	2.81	30	
Surr: Tetrachlorethene	0.428		0.4000		107	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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_201209B

The QC data in batch 98762 applies to the following samples: 2012024-03C, 2012024-04C

Sample ID: **MB-98762**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MBLK**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:23:01 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-98762**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCS**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:25:17 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00212	0.000200	0.00200	0	106	85	115			

Sample ID: **LCSD-98762**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCSD**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:27:33 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00212	0.000200	0.00200	0	106	85	115	0	15	

Sample ID: **2012026-01C MS**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MS**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:47:57 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00210	0.000200	0.00200	0	105	80	120			

Sample ID: **2012026-01C MSD**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MSD**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:50:14 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00209	0.000200	0.00200	0	104	80	120	0.477	15	

Sample ID: **2012026-01C SD**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **SD**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:52:30 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.000400	0.00100	0	0				0	10	

Sample ID: **2012026-01C PDS**	Batch ID: **98762**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **PDS**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 11:54:46 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00261	0.000200	0.00250	0	104	85	115			

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_201209B

The QC data in batch 98793 applies to the following samples: 2012024-02C

Sample ID: **MB-98793**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MBLK**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 12:57:33 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-98793**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCS**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 1:02:08 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00210	0.000200	0.00200	0	105	85	115			

Sample ID: **LCSD-98793**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **LCSD**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 1:04:26 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00208	0.000200	0.00200	0	104	85	115	0.957	15	

Sample ID: **2012022-01A MS**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MS**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 1:09:01 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0105	0.00100	0.0100	0	104	80	120			

Sample ID: **2012022-01A MSD**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **MSD**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 1:11:19 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0104	0.00100	0.0100	0	104	80	120	0.962	15	

Sample ID: **2012022-01A SD**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **SD**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 1:13:37 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.00200	0.00500	0	0				0	10	

Sample ID: **2012022-01A PDS**	Batch ID: **98793**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **PDS**	Run ID: **CETAC2_HG_201209B**	Analysis Date: **12/9/2020 1:15:55 PM**	Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0126	0.00100	0.0125	0	100	85	115			

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_201207A

The QC data in batch 98759 applies to the following samples: 2012024-03C, 2012024-04C

Sample ID: **MB-98759** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 10:51:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00500								
Lead	<0.000300	0.00100								
Selenium	<0.00200	0.00500								
Silver	<0.00100	0.00200								

Sample ID: **LCS-98759** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 10:53:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.207	0.00500	0.200	0	103	80	120			
Barium	0.206	0.0100	0.200	0	103	80	120			
Cadmium	0.209	0.00100	0.200	0	104	80	120			
Chromium	0.207	0.00500	0.200	0	103	80	120			
Lead	0.203	0.00100	0.200	0	101	80	120			
Selenium	0.202	0.00500	0.200	0	101	80	120			
Silver	0.206	0.00200	0.200	0	103	80	120			

Sample ID: **LCSD-98759** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 10:55:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.208	0.00500	0.200	0	104	80	120	0.626	15	
Barium	0.206	0.0100	0.200	0	103	80	120	0.036	15	
Cadmium	0.208	0.00100	0.200	0	104	80	120	0.364	15	
Chromium	0.207	0.00500	0.200	0	104	80	120	0.411	15	
Lead	0.204	0.00100	0.200	0	102	80	120	0.663	15	
Selenium	0.202	0.00500	0.200	0	101	80	120	0.169	15	
Silver	0.206	0.00200	0.200	0	103	80	120	0.239	15	

Sample ID: **2012026-02C SD** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 11:01:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0139	0.0250	0	0.0134				4.14	20	
Barium	0.262	0.0500	0	0.263				0.235	20	
Cadmium	<0.00150	0.00500	0	0				0	20	
Chromium	<0.0100	0.0250	0	0				0	20	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_201207A

Sample ID: **2012026-02C SD** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 11:01:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	<0.00150	0.00500	0	0.00132				0	20	
Selenium	<0.0100	0.0250	0	0				0	20	
Silver	<0.00500	0.0100	0	0				0	20	

Sample ID: **2012026-02C PDS** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 11:21:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.221	0.00500	0.200	0.0134	104	75	125			
Barium	0.459	0.0100	0.200	0.263	97.8	75	125			
Cadmium	0.209	0.00100	0.200	0	104	75	125			
Chromium	0.210	0.00500	0.200	0	105	75	125			
Lead	0.211	0.00100	0.200	0.00132	105	75	125			
Selenium	0.198	0.00500	0.200	0	98.8	75	125			
Silver	0.184	0.00200	0.200	0	91.9	75	125			

Sample ID: **2012026-02C MS** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 11:23:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.220	0.00500	0.200	0.0134	103	75	125			
Barium	0.473	0.0100	0.200	0.263	105	75	125			
Cadmium	0.203	0.00100	0.200	0	102	75	125			
Chromium	0.202	0.00500	0.200	0	101	75	125			
Lead	0.205	0.00100	0.200	0.00132	102	75	125			
Selenium	0.196	0.00500	0.200	0	98.0	75	125			
Silver	0.197	0.00200	0.200	0	98.4	75	125			

Sample ID: **2012026-02C MSD** Batch ID: **98759** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS4_201207A** Analysis Date: **12/7/2020 11:25:00 AM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.222	0.00500	0.200	0.0134	104	75	125	0.968	15	
Barium	0.471	0.0100	0.200	0.263	104	75	125	0.392	15	
Cadmium	0.204	0.00100	0.200	0	102	75	125	0.592	15	
Chromium	0.203	0.00500	0.200	0	101	75	125	0.262	15	
Lead	0.207	0.00100	0.200	0.00132	103	75	125	1.10	15	
Selenium	0.202	0.00500	0.200	0	101	75	125	2.95	15	
Silver	0.198	0.00200	0.200	0	98.8	75	125	0.380	15	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_201208A

The QC data in batch 98787 applies to the following samples: 2012024-02C

Sample ID: **MB-98787** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:26:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00500								
Lead	<0.000300	0.00100								
Selenium	<0.00200	0.00500								
Silver	<0.00100	0.00200								

Sample ID: **LCS-98787** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:29:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.205	0.00500	0.200	0	102	80	120			
Barium	0.204	0.0100	0.200	0	102	80	120			
Cadmium	0.205	0.00100	0.200	0	102	80	120			
Chromium	0.216	0.00500	0.200	0	108	80	120			
Lead	0.193	0.00100	0.200	0	96.7	80	120			
Selenium	0.205	0.00500	0.200	0	102	80	120			
Silver	0.192	0.00200	0.200	0	95.9	80	120			

Sample ID: **LCSD-98787** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:31:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.206	0.00500	0.200	0	103	80	120	0.320	15	
Barium	0.206	0.0100	0.200	0	103	80	120	0.837	15	
Cadmium	0.207	0.00100	0.200	0	104	80	120	1.32	15	
Chromium	0.204	0.00500	0.200	0	102	80	120	5.79	15	
Lead	0.197	0.00100	0.200	0	98.4	80	120	1.75	15	
Selenium	0.206	0.00500	0.200	0	103	80	120	0.633	15	
Silver	0.194	0.00200	0.200	0	96.9	80	120	1.08	15	

Sample ID: **2012044-01C SD** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:38:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.0100	0.0250	0	0				0	20	
Barium	0.0896	0.0500	0	0.0891				0.504	20	
Cadmium	<0.00150	0.00500	0	0				0	20	
Chromium	0.0455	0.0250	0	0.0459				0.895	20	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_201208A

Sample ID: **2012044-01C SD** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:38:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	<0.00150	0.00500	0	0				0	20	
Selenium	<0.0100	0.0250	0	0.00344				0	20	
Silver	<0.00500	0.0100	0	0				0	20	

Sample ID: **2012044-01C PDS** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:47:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00500	0.200	0	102	75	125			
Barium	0.295	0.0100	0.200	0.0891	103	75	125			
Cadmium	0.210	0.00100	0.200	0	105	75	125			
Chromium	0.255	0.00500	0.200	0.0459	105	75	125			
Lead	0.204	0.00100	0.200	0	102	75	125			
Selenium	0.203	0.00500	0.200	0.00344	99.5	75	125			
Silver	0.186	0.00200	0.200	0	92.8	75	125			

Sample ID: **2012044-01C MS** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:49:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00500	0.200	0	102	75	125			
Barium	0.295	0.0100	0.200	0.0891	103	75	125			
Cadmium	0.206	0.00100	0.200	0	103	75	125			
Chromium	0.249	0.00500	0.200	0.0459	101	75	125			
Lead	0.198	0.00100	0.200	0	99.0	75	125			
Selenium	0.204	0.00500	0.200	0.00344	100	75	125			
Silver	0.195	0.00200	0.200	0	97.3	75	125			

Sample ID: **2012044-01C MSD** Batch ID: **98787** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS5_201208A** Analysis Date: **12/8/2020 3:51:00 PM** Prep Date: **12/8/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.203	0.00500	0.200	0	101	75	125	0.354	15	
Barium	0.294	0.0100	0.200	0.0891	102	75	125	0.483	15	
Cadmium	0.206	0.00100	0.200	0	103	75	125	0.346	15	
Chromium	0.247	0.00500	0.200	0.0459	101	75	125	0.565	15	
Lead	0.198	0.00100	0.200	0	99.1	75	125	0.049	15	
Selenium	0.202	0.00500	0.200	0.00344	99.4	75	125	0.762	15	
Silver	0.195	0.00200	0.200	0	97.7	75	125	0.420	15	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_201204A

The QC data in batch 98767 applies to the following samples: 2012024-01A, 2012024-02A, 2012024-03A, 2012024-04A, 2012024-05A

Sample ID: **LCS-98767** Batch ID: **98767** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS7_201204A** Analysis Date: **12/4/2020 12:46:00 PM** Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0240	0.00100	0.0232	0	104	81	122			
Ethylbenzene	0.0233	0.00100	0.0232	0	100	80	120			
m,p-Xylene	0.0471	0.00200	0.0464	0	101	80	120			
o-Xylene	0.0232	0.00100	0.0232	0	99.8	80	120			
Toluene	0.0241	0.00200	0.0232	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	210		200.0		105	72	119			
Surr: 4-Bromofluorobenzene	197		200.0		98.5	76	119			
Surr: Dibromofluoromethane	199		200.0		99.4	85	115			
Surr: Toluene-d8	193		200.0		96.3	81	120			

Sample ID: **MB-98767** Batch ID: **98767** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS7_201204A** Analysis Date: **12/4/2020 1:36:00 PM** Prep Date: **12/4/2020**

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	214		200.0		107	72	119			
Surr: 4-Bromofluorobenzene	200		200.0		99.8	76	119			
Surr: Dibromofluoromethane	201		200.0		100	85	115			
Surr: Toluene-d8	194		200.0		96.9	81	120			

Sample ID: **SB-201204** Batch ID: **98767** TestNo: **SW8260D** Units: **mg/L**
SampType: **SBLK** Run ID: **GCMS7_201204A** Analysis Date: **12/4/2020 4:22:00 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							
Surr: 1,2-Dichloroethane-d4	213		0							
Surr: 4-Bromofluorobenzene	207		0							
Surr: Dibromofluoromethane	198		0							
Surr: Toluene-d8	192		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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_201204A

Sample ID: **2012029-01AMS**	Batch ID: **98767**	TestNo: **SW8260D**	Units: **mg/L**
SampType: **MS**	Run ID: **GCMS7_201204A**	Analysis Date: **12/5/2020 12:37:00 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0220	0.00100	0.0232	0	94.9	81	122			
Ethylbenzene	0.0213	0.00100	0.0232	0	91.6	80	120			
m,p-Xylene	0.0429	0.00200	0.0464	0	92.5	80	120			
o-Xylene	0.0213	0.00100	0.0232	0	91.9	80	120			
Toluene	0.0219	0.00200	0.0232	0	94.2	80	120			
Surr: 1,2-Dichloroethane-d4	209		200.0		105	72	119			
Surr: 4-Bromofluorobenzene	200		200.0		100	76	119			
Surr: Dibromofluoromethane	201		200.0		100	85	115			
Surr: Toluene-d8	191		200.0		95.5	81	120			

Sample ID: **2012029-01AMSD**	Batch ID: **98767**	TestNo: **SW8260D**	Units: **mg/L**
SampType: **MSD**	Run ID: **GCMS7_201204A**	Analysis Date: **12/5/2020 1:02:00 AM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0225	0.00100	0.0232	0	97.0	81	122	2.16	20	
Ethylbenzene	0.0215	0.00100	0.0232	0	92.6	80	120	1.03	20	
m,p-Xylene	0.0433	0.00200	0.0464	0	93.3	80	120	0.858	20	
o-Xylene	0.0216	0.00100	0.0232	0	93.0	80	120	1.21	20	
Toluene	0.0225	0.00200	0.0232	0	96.8	80	120	2.71	20	
Surr: 1,2-Dichloroethane-d4	208		200.0		104	72	119	0	0	
Surr: 4-Bromofluorobenzene	198		200.0		99.1	76	119	0	0	
Surr: Dibromofluoromethane	202		200.0		101	85	115	0	0	
Surr: Toluene-d8	192		200.0		95.8	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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_201207A

The QC data in batch 98780 applies to the following samples: 2012024-04A

Sample ID: **LCS-98780** Batch ID: **98780** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS7_201207A** Analysis Date: **12/7/2020 11:56:00 AM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0250	0.00100	0.0232	0	108	81	122			
Surr: 1,2-Dichloroethane-d4	207		200.0		103	72	119			
Surr: 4-Bromofluorobenzene	200		200.0		100	76	119			
Surr: Dibromofluoromethane	201		200.0		101	85	115			
Surr: Toluene-d8	191		200.0		95.6	81	120			

Sample ID: **MB-98780** Batch ID: **98780** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS7_201207A** Analysis Date: **12/7/2020 12:45:00 PM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4	209		200.0		105	72	119			
Surr: 4-Bromofluorobenzene	205		200.0		102	76	119			
Surr: Dibromofluoromethane	202		200.0		101	85	115			
Surr: Toluene-d8	191		200.0		95.6	81	120			

Sample ID: **2012036-10AMS** Batch ID: **98780** TestNo: **SW8260D** Units: **mg/L**
SampType: **MS** Run ID: **GCMS7_201207A** Analysis Date: **12/7/2020 9:50:00 PM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0228	0.00100	0.0232	0	98.4	81	122			
Surr: 1,2-Dichloroethane-d4	216		200.0		108	72	119			
Surr: 4-Bromofluorobenzene	196		200.0		97.8	76	119			
Surr: Dibromofluoromethane	206		200.0		103	85	115			
Surr: Toluene-d8	188		200.0		93.8	81	120			

Sample ID: **2012036-10AMSD** Batch ID: **98780** TestNo: **SW8260D** Units: **mg/L**
SampType: **MSD** Run ID: **GCMS7_201207A** Analysis Date: **12/7/2020 10:15:00 PM** Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0231	0.00100	0.0232	0	99.4	81	122	1.05	20	
Surr: 1,2-Dichloroethane-d4	213		200.0		106	72	119	0	0	
Surr: 4-Bromofluorobenzene	196		200.0		98.2	76	119	0	0	
Surr: Dibromofluoromethane	202		200.0		101	85	115	0	0	
Surr: Toluene-d8	191		200.0		95.7	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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_201207A

The QC data in batch 98766 applies to the following samples: 2012024-02D, 2012024-03D, 2012024-04D

Sample ID: **MB-98766**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **MBLK**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 11:19:54 AM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								

Sample ID: **LCS-98766**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **LCS**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 11:35:54 AM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.66	1.00	10.00	0	96.6	90	110			

Sample ID: **LCSD-98766**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **LCSD**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 11:51:54 AM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.71	1.00	10.00	0	97.1	90	110	0.567	20	

Sample ID: **2012024-02DMS**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 1:53:06 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	220	10.0	200.0	20.53	99.7	90	110			

Sample ID: **2012024-02DMSD**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 2:09:06 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	220	10.0	200.0	20.53	100	90	110	0.264	20	

Sample ID: **2012026-01DMS**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 4:33:06 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	305	10.0	200.0	110.6	97.4	90	110			

Sample ID: **2012026-01DMSD**	Batch ID: **98766**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_201207A**	Analysis Date: **12/7/2020 4:49:06 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	306	10.0	200.0	110.6	97.7	90	110	0.217	20	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_201208A

The QC data in batch 98772 applies to the following samples: 2012024-03D

Sample ID: MB-98772	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: MBLK	Run ID: IC2_201208A	Analysis Date: 12/8/2020 10:53:37 AM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00	0							

Sample ID: LCS-98772	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: LCS	Run ID: IC2_201208A	Analysis Date: 12/8/2020 11:09:37 AM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.79	1.00	10.00	0	97.9	90	110			

Sample ID: LCSD-98772	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: LCSD	Run ID: IC2_201208A	Analysis Date: 12/8/2020 11:25:37 AM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.76	1.00	10.00	0	97.6	90	110	0.384	20	

Sample ID: 2012031-01BMS	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: MS	Run ID: IC2_201208A	Analysis Date: 12/8/2020 3:27:41 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	3430	100	2000	1489	97.3	90	110			

Sample ID: 2012031-01BMSD	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: MSD	Run ID: IC2_201208A	Analysis Date: 12/8/2020 3:43:41 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	3430	100	2000	1489	97.2	90	110	0.025	20	

Sample ID: 2012007-01BMS	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: MS	Run ID: IC2_201208A	Analysis Date: 12/8/2020 5:51:41 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	227	10.0	200.0	28.17	99.6	90	110			

Sample ID: 2012007-01BMSD	Batch ID: 98772	TestNo: E300	Units: mg/L
SampType: MSD	Run ID: IC2_201208A	Analysis Date: 12/8/2020 6:07:41 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	226	10.0	200.0	28.17	99.1	90	110	0.451	20	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_201209A

The QC data in batch 98792 applies to the following samples: 2012024-03D

Sample ID: MB-98792	Batch ID: 98792	TestNo: E300	Units: mg/L
SampType: MBLK	Run ID: IC2_201209A	Analysis Date: 12/9/2020 12:08:54 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								

Sample ID: LCS-98792	Batch ID: 98792	TestNo: E300	Units: mg/L
SampType: LCS	Run ID: IC2_201209A	Analysis Date: 12/9/2020 12:24:54 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.82	1.00	10.00	0	98.2	90	110			

Sample ID: LCSD-98792	Batch ID: 98792	TestNo: E300	Units: mg/L
SampType: LCSD	Run ID: IC2_201209A	Analysis Date: 12/9/2020 12:40:54 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.88	1.00	10.00	0	98.8	90	110	0.673	20	

Sample ID: 2012037-04CMS	Batch ID: 98792	TestNo: E300	Units: mg/L
SampType: MS	Run ID: IC2_201209A	Analysis Date: 12/9/2020 3:22:40 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2020	100	2000	0	101	90	110			

Sample ID: 2012037-04CMSD	Batch ID: 98792	TestNo: E300	Units: mg/L
SampType: MSD	Run ID: IC2_201209A	Analysis Date: 12/9/2020 3:38:40 PM	Prep Date: 12/8/2020

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2010	100	2000	0	101	90	110	0.504	20	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: **WC_201204E**

The QC data in batch 98761 applies to the following samples: 2012024-02D, 2012024-03D, 2012024-04D

Sample ID: **MB-98761**	Batch ID: **98761**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_201204E**	Analysis Date: **12/4/2020 3:30:00 PM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-98761**	Batch ID: **98761**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_201204E**	Analysis Date: **12/4/2020 3:30:00 PM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	773	10.0	745.6	0	104	90	113			

Sample ID: **2012017-01C-DUP**	Batch ID: **98761**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_201204E**	Analysis Date: **12/4/2020 3:30:00 PM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	2250	50.0	0	2250				0	5	

Sample ID: **2012024-02D-DUP**	Batch ID: **98761**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_201204E**	Analysis Date: **12/4/2020 3:30:00 PM**	Prep Date: **12/4/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	1420	200	0	1360				4.32	5	

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: 2012024
Project: Hobbs Tank

ANALYTICAL QC SUMMARY REPORT

RunID: **WC_201207B**

The QC data in batch 98781 applies to the following samples: 2012024-02D

Sample ID: **MB-98781**	Batch ID: **98781**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_201207B**	Analysis Date: **12/7/2020 5:30:00 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-98781**	Batch ID: **98781**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_201207B**	Analysis Date: **12/7/2020 5:30:00 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	775	10.0	745.6	0	104	90	113			

Sample ID: **2012031-01B-DUP**	Batch ID: **98781**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_201207B**	Analysis Date: **12/7/2020 5:30:00 PM**	Prep Date: **12/7/2020**

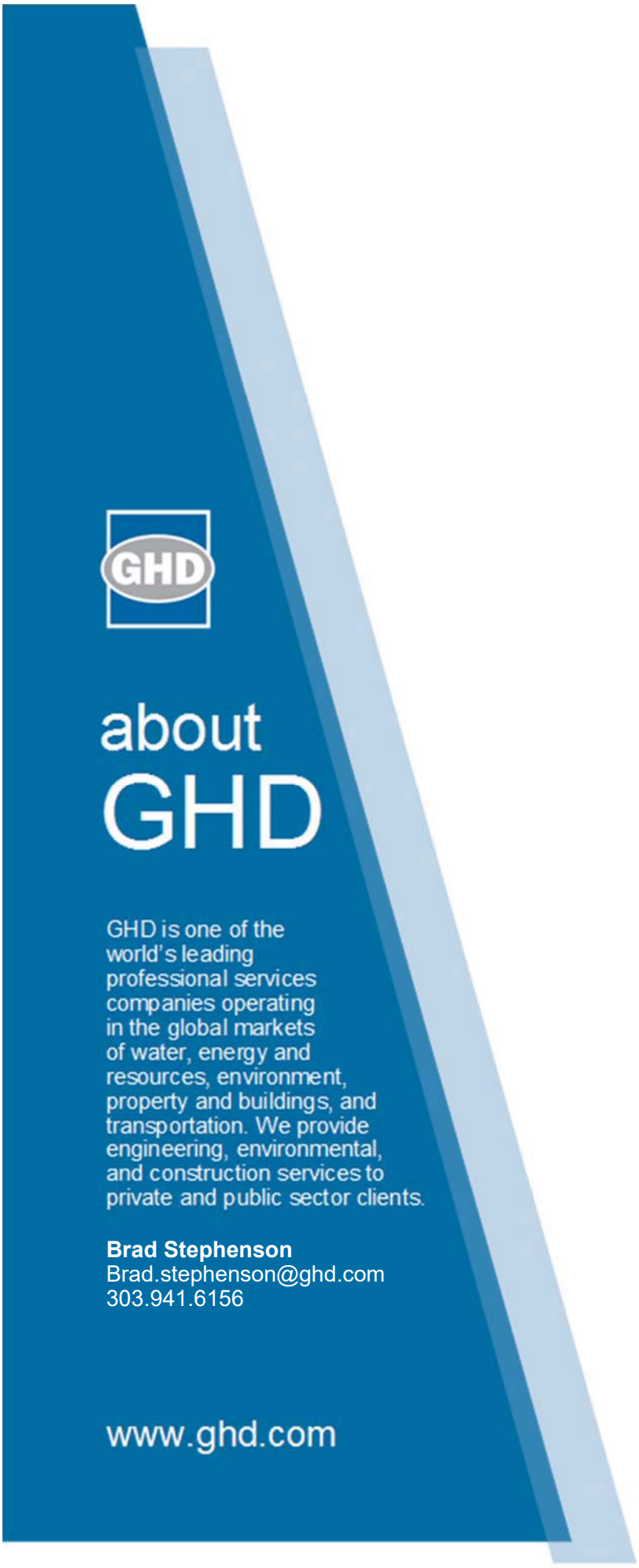
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	10500	200	0	10660				1.13	5	

Sample ID: **2012031-02B-DUP**	Batch ID: **98781**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_201207B**	Analysis Date: **12/7/2020 5:30:00 PM**	Prep Date: **12/7/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	10400	200	0	10360				0.385	5	

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


GHD
about
GHD
GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 32274

CONDITIONS

Operator:	OGRID:
NAVAJO REFINING COMPANY, L.L.C. P.O. Box 159 Artesia, NM 88211	15694
	Action Number: 32274
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 Supplemental Site Closure Report: Content satisfactory 1. Follow recommendations stated within 2020 Supplemental Site Closure Report. a. Recondition well HTRW-1 using a vacuum truck, Cool-OX solution, and air sparging b. Well HTRW-1 to be sampled quarterly c. All other wells will be sampled bi-annually if sufficient water is present d. All groundwater samples to be analyzed for BTEX per US EPA Method 8260B e. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022	1/3/2022