2023 Groundwater Monitoring and Remediation Report

East Hobbs Junction
Lea County, New Mexico

Phillips 66 Company

REVIEWED
By Mike Buchanan at 9:46 am, Dec 24, 2024

Review of the 2023 Groundwater Monitoring and Remediation Report for East Hobbs Junction: Content Satisfactory
1. Continue to conduct groundwater monitoring as prescribed by OCD and as scheduled. Analyze for chloride, BTEX, and TPH (DRO, GRO).
2. If Phillips 66 is considering a "risk-based" closure as suggested in the recommendations section of this report, guidelines for submitting an alternative abatement standard petition as outlined in the provisions in 19.15.30.9 NMAC paragraph (F), subparagraphs 1 through 6 must be met to be considered.
3. According to figure 8 of the annual report, all wells are dry except for 6 groundwater monitoring wells. Phillips 66 must propose a work plan to either drill dry wells deeper until groundwater levels are sufficient for sampling, submit a request for variance with justification to not sample dry wells, or propose another work plan to replace wells that have gone dry. There may be contamination in the smear zone where groundwater levels have lowered, with contamination still present in groundwater underneath the site that is not being monitored.
4. Please propose an option within ninety (90) days from receipt of this determination

→ The Power of Commitment

Executive Summary

GHD conducted four quarterly groundwater monitoring events on March 20, June 22, September 19 and December 19, 2023 at the Phillips 66 East Hobbs Junction site in Hobbs, New Mexico. Groundwater levels were gauged in all site monitor and remediation wells using an oil/water interface probe prior to purging and sampling.

Five groundwater samples were collected during the March 2023 event, seven groundwater samples were collected during the June 2023 event, six groundwater samples were collected during the September 2023 event and five groundwater samples were collected during the December 2023 event. All unsampled wells had insufficient water to collect a sample. Groundwater samples were submitted under chain of custody documentation to Pace Analytical Laboratories of Mount Juliet, Tennessee. The samples were analyzed for benzene, toluene, ethylbenzene, xylenes, total petroleum hydrocarbons – gasoline range organics, total petroleum hydrocarbons – diesel range organics, and chloride. Additional groundwater samples from the March 2023 event were submitted under chain of custody documentation to Eurofins Environment Testing of Midland, Texas, for analysis of heterotrophic plate counts. Groundwater samples collected from MW-1 and MW-2 during the March, June, September and December sampling events, and MW-3 during the September sampling event were reported by the laboratory to be above the New Mexico Water Quality Control Commission's groundwater quality standards for benzene.

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1. Introduction

GHD Services Inc. (GHD) prepared this 2023 Groundwater Monitoring and Remediation Report on behalf of Phillips 66 Company (Phillips 66). This report summarizes groundwater monitoring and sampling, and remediation activities at East Hobbs Junction (site) in March, June, September, and December 2023. The report presents the following:

– Site Description and History
– Regulatory Framework
– Groundwater Monitoring and Sampling
– Groundwater Remediation Activities
– Summary Corrective Action Activities and Recommendations

2. Site Description and History

The site is located in Lea County, New Mexico (Section 08, Township 19S, Range 38E; Figure 1). site remedial activities began in January 2000, following the discovery of a release of crude oil from a gathering line at the East Hobbs Junction. The property on which the release occurred is largely undeveloped arid land. The site location is presented on Figure 1.

On March 23, 1999, Phillips 66 personnel discovered a release of unrefined petroleum products (crude oil) associated with a local well field gathering pipeline system located near the town of Hobbs, New Mexico. The area consists of several gathering lines which meet in one locality. The failed line was a 6-inch diameter line which was not in service but was open to the main line. The line leak was noted by the evidence of oil impacts on the ground surface in the area of the release. The quantity of crude oil released was not known. Phillips 66 excavated approximately 200 cubic yards of petroleum impacted soil from around and below the release location. The limits of the excavation were approximately 10 feet wide by 60 feet long and averaged approximately 6 to 8 feet deep with the deepest extent around 12 feet. Excavation activities were halted because of other active petroleum pipelines present in the area. Three groundwater monitor wells were then installed and approximately 3 feet of crude oil was detected on the water table in each monitor well.

Assessment activities have been conducted at the site to define the crude oil impacts, and a soil and groundwater remediation system was installed to address the impacts. The remediation system installation consisted of soil vapor extraction (SVE), air sparge (AS), and light non aqueous phase liquid (LNAPL) recovery. Figure 2 illustrates the locations of the existing pipeline corridors, the site monitor and remediation wells, the remediation buildings, and storage tank at the site. Higgins and Associates, L.L.C. of Centennial, Colorado performed the installation of the remediation system, initial startup, O&M, and required monitoring activities until September 2003. In September 2003, Tetra Tech assumed responsibility for the remedial oversight duties at the site. On August 5, 2008, the SVE and AS systems were converted into a bioventing system utilizing electronic timers to cycle the periods of operation to promote oxygen enhancement in the vadose zone to encourage biodegradation. The skimmer pumps have been removed from all monitor wells except MW-2 and MW-9.

In August 2011, GHD (formerly Conestoga Rovers and Associates) was retained as the environmental consultant for the site by Phillips 66. Periodic O&M of the remediation system was performed until the skimming operations were shut down in 2014 due to mechanical problems.

Remedial activities continued in 2015 with the use of mobile dual phase extraction (MDPE) to remove residual LNAPL to the extent practical. MDPE events were conducted in 2015 in March, April, July, and November.

Additional MDPE events were conducted in 2017 in February, April, and June. GHD evaluated the MDPE data collected at the site and determined that the LNAPL recovery rate had decreased from approximately 1% in 2015 to

approximately 0.3% in the first half of 2017. In order to enhance the recovery rate, GHD performed a pilot test utilizing Ivey-sol Surfactant Enhanced Remediation (SER) to remove absorbed LNAPL near the release area.

On December 5, 2017, GHD gravity-fed 200 gallons of surfactant into both MW-1 and RW-2, and AcuVac initiated MDPE approximately three hours after the injection. An additional Ivey-sol SER injection and MDPE recovery event was performed on December 6, 2017. A total of 1,702 gallons of total fluids and an immeasurable amount of LNAPL were recovered during a 7-hour period.

An initial Cool-Ox® injection event was performed in May 2018. GHD and Deep Earth Technologies, Inc. (DTI) injected Cool-Ox®, which is a patented solution of calcium peroxide that generates hydrogen peroxide slowly and facilitates the oxidation of petroleum hydrocarbons. Cool-Ox® was injected directly into wells MW-1, MW-2, MW-3, MW-7, MW-9, MW-10 and AS wells SP-1, SP-2, SP-7, and SP-8. A total of 7,100 gallons of Cool-Ox® were injected over a 4-day period. Following the injections of Cool-Ox®, LNAPL was not observed until December 2019 following a drop in the water table.

In June 2021, GHD and subcontractor White Drilling installed nine new remediation wells around existing wells MW-1, MW-2/RW-1, MW-3/RW-3, and MW-9/RW-2. The remediation wells were installed to inject Cool-Ox® to treat remaining subsurface impacts related to the initial release and are presented on Figure 15.

In the fourth quarter of 2022, GHD oversaw the successful injection of 6,035 gallons of Cool-Ox®, and post-injection monitoring was completed in the third quarter of 2023.

3. Regulatory Framework

The New Mexico Oil Conservation Division (NMOCD) is the regulatory agency overseeing the cleanup of petroleum hydrocarbon impacts associated with the site. The site has adopted New Mexico Water Quality Control Commission Standards contained in Title 20, Chapter 6, Part 2, Section 3103 (20.6.2.3103 NMAC) effective November 15, 1996 and are presented as Appendix A. These standards were in effect at the time the November 2, 2000 Stage 2 Abatement Plan for Groundwater Abatement (AP-15) for the East Hobbs Junction Site in Hobbs, New Mexico was approved.

Per Title 19, Chapter 15, Part 30, Section 10 of the New Mexico Administrative Code (19.15.30.10 NMAC) Modification of Abatement Standards: *If applicable abatement standards are modified after the division approves the abatement measures, the abatement standards that are in effect at the time that the division of the abatement measures shall be the abatement standards for the duration of the abatement action, unless the director determines that compliance with those standards may with reasonable probability create a present of future health to public health or the environment.*

The 1996 NMWQCC Human Health Standards are listed in the following constituents of concern table for comparison purposes and evaluation of groundwater analytical results contained in this report.

Constituent Of Concern	1996 NMWQCC Standards (mg/L)
Benzene	0.01
Toluene	0.75
Ethylbenzene	0.75
Xylenes	0.62
TPH-DRO – Total Petroleum Hydrocarbons Diesel Range Organics	NA
TPH-GRO – Total Petroleum Hydrocarbons Gasoline Range Organics	NA
Chloride	250

4. Groundwater Monitoring and Sampling

4.1 Groundwater Monitoring – March 2023

GHD personnel gauged 28 on-site monitor wells on March 20 and 21, 2023 to measure groundwater elevation. Well caps were removed before gauging to allow groundwater levels to equilibrate. An oil/water interface probe was used to measure groundwater depths and check for the presence of LNAPL in each of the monitor wells. Groundwater measurements proceeded from clean wells to the wells containing LNAPL to minimize the potential for cross contamination between wells. The oil/water interface probe was cleaned with an Alconox®/de-ionized water solution and rinsed with de-ionized water after each use.

Monitor wells MW-4 (SVE-1), MW-5 (SVE-2), MW-6 (RW-4), MW-10 (RW-6), MW-11 (RW-7), MW-12 (SVE-9), MW-13, MW-14 (SVE-11), MW-15 (SVE-12), MW-16, MW-17, MW-18 (SVE-13), MW-19, MW-20, MW-21, MW-22, MW-23, MW-25, and SVE-10 were all measured dry. Groundwater elevations ranged from 3571.54 ft amsl at MW-9 (RW-2) to 3572.58 ft amsl at MW-24. The groundwater flow direction as measured from site wells was to the south-southeast at a gradient of approximately 0.0023ft/ft which is generally consistent with historical data.

Table 1 presents the Groundwater Elevation Data. Figure 3 presents the Groundwater Gradient Map – March 2023.

4.2 Groundwater Sampling – March 2023

GHD personnel collected samples for the first quarter 2023 groundwater sampling event from five on-site monitor wells on March 21 and 22, 2023. Groundwater samples were collected from MW-1, MW-2, MW-3, MW-26, and MW-27. Monitor wells MW-7 (RW-5), MW-8 (SVE-5), MW-9 (RW-2), and MW-24 all had less than 1 foot of water, which was determined insufficient for sampling.

Samples were collected via bailer method. Field parameters including pH, temp, and conductivity were collected during the purging of monitor wells. The groundwater samples were collected with clean, disposable bailers, decanted into clean containers supplied by the analytical laboratory, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The coolers were sealed for transport and shipped to Pace Analytical Laboratories (Pace) of Mount Juliet, TN under chain of custody protocol. Groundwater not used for sampling is stored on-site in a 140-barrel above ground storage tank, for off-site disposal.

Pace analyzed the groundwater samples for:

- BTEX by EPA Method 8260B;
- TPH-GRO by EPA Method 8015B;
- TPH-DRO by EPA Method 8015B; and
- Chloride by EPA Method 300.

Additional samples were collected for heterotrophic plate counts from wells MW-1, MW-2, and MW-3 under the same sampling procedures and protocol. Monitoring wells MW-6, MW-8 and MW-9 were not sampled for heterotrophic plate counts due to insufficient water in the wells. The samples were shipped to Eurofins Environment Testing (Eurofins) of Midland, TX. Eurofins analyzed the groundwater samples for heterotrophic plate count by SM method 9215C. This analysis is as specified in the Cool-Ox® Work Plan submitted by GHD in July 2022.

4.3 Groundwater Analytical Results – March 2023

Sample results for the March 2023 quarterly groundwater monitoring events are summarized below.

- Benzene was detected above the groundwater remedial objective of 0.01 mg/L in groundwater samples collected at MW-1 and MW-2 at concentrations of 0.088 mg/L and 0.065 mg/L, respectively. Benzene was not detected above the remedial objective in the remaining monitor wells.

- Toluene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the March 2023 sampling event.
- Ethylbenzene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the March 2023 sampling event.
- Total xylenes were not detected above the groundwater remedial objective of 0.62 mg/L in groundwater samples collected during the March 2023 sampling event.
- TPH-GRO were not detected above the laboratory detection limit in groundwater samples. Groundwater remedial objectives for TPH-GRO have not been established for the site.
- TPH-DRO was detected above the laboratory detection limit in groundwater samples MW-1 at 10.9 mg/L, MW-2 at 4.4 mg/L, and MW-3 at 4.8 mg/L. Groundwater remedial objectives for TPH-DRO have not been established for the site.
- Chloride was not detected above the groundwater remedial objective of 250 mg/L in any groundwater samples collected during the March 2023 sampling event.

Table 2 presents Groundwater Analytical Data – BTEX, TPH-GRO and TPH-DRO and Table 3 presents Groundwater Analytical Data – Inorganics. Figure 4 presents Groundwater Analytical Results – Organics – March 2023; Figure 5 presents Groundwater Analytical Results – Inorganics – March 2023. The Pace analytical reports are presented as Appendix B.

4.4 Groundwater Monitoring – June 2023

GHD personnel gauged 28 on-site monitor wells on June 22, 2023 to measure groundwater elevation. Well caps were removed before gauging to allow groundwater levels to equilibrate. An oil/water interface probe was used to measure groundwater depths and check for the presence of LNAPL in each of the monitor wells. Groundwater measurements proceeded from clean wells to the wells containing LNAPL to minimize the potential for cross contamination between wells. The oil/water interface probe was cleaned with an Alconox®/de-ionized water solution and rinsed with de-ionized water after each use.

Monitor wells MW-4 (SVE-1) through MW-6 (RW-4), MW-8 (SVE-5) through MW-23, MW-25, and SVE-10 were all measured dry. Groundwater elevations ranged from 3571.34 ft amsl at wells MW-26 and MW-27 to 3574.51 ft amsl at MW-7 (RW-5). The groundwater flow direction as measured from site wells was to the southeast at a gradient of approximately 0.0025 ft/ft and is generally consistent with historical data.

Table 1 presents the Groundwater Elevation Data. Figure 6 presents Groundwater Gradient Map – June 2023.

4.5 Groundwater Sampling – June 2023

GHD personnel collected samples for the second quarter 2023 groundwater sampling event from six on-site monitor wells on June 22, 2023. Groundwater samples were collected from MW-1, MW-2, MW-3, MW-24, MW-26, and MW-27. A duplicate sample was taken from MW-26. MW-7 had a measurable amount of water, but not enough to produce a sample.

Samples were collected via bailer method. Field parameters including pH, temp, and conductivity were collected during the purging of monitor wells, except at MW-24, which had too little water to purge or measure field parameters before collecting the sample. The groundwater samples, including the duplicate sample, were collected with clean, disposable bailers, decanted into clean containers supplied by the analytical laboratory, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The coolers were sealed for transport and shipped to Pace under chain of custody protocol. Purge water is stored on-site in a 140-barrel above ground storage tank, for off-site disposal.

Pace analyzed the groundwater samples for:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260B;

- TPH-GRO by EPA Method 8015B;
- TPH-DRO by EPA Method 8015B; and
- Chloride by EPA Method 300.

4.6 Groundwater Analytical Results – June 2023

Sample results for the June 2023 quarterly groundwater monitoring event are summarized below.

- Benzene was detected at concentrations above the groundwater remedial objective of 0.01 mg/L in MW-1 and MW-2 at concentrations of 0.0584 mg/L and 0.1257 mg/L respectively. Benzene was not detected above the remedial objective in the remaining monitor wells.
- Toluene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the June 2023 sampling event.
- Ethylbenzene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the June 2023 sampling event.
- Total xylenes were not detected above the groundwater remedial objective of 0.62 mg/L in groundwater samples collected during the June 2023 sampling event.
- TPH-GRO was detected above the laboratory detection limit in groundwater samples MW-2 and MW-3 at concentrations of 3.27 mg/L and 0.55 mg/L, respectively. Groundwater remedial objectives for TPH-GRO have not been established for the site.
- TPH-DRO was detected above the laboratory detection limit in groundwater samples MW-1, MW-2, and MW-3. The highest concentration of TPH-DRO was reported as 8.9 mg/L in the sample taken at MW-1. Groundwater remedial objectives for TPH-DRO have not been established for the site.
- Chloride was not detected above the groundwater remedial objective of 250 mg/L in any of the wells sampled during the June 2023 event.

Table 2 presents Groundwater Analytical Data – BTEX, TPH-GRO and TPH-DRO; Table 3 presents Groundwater Analytical Data – Inorganics. Figure 7 presents Groundwater Analytical Results – Organics – June 2023; Figure 8 presents Groundwater Analytical Results – Inorganics – June 2023. The Pace analytical reports are presented as Appendix B.

4.7 Groundwater Monitoring – September 2023

GHD personnel gauged 28 on-site monitor wells on September 19, 2023 to measure groundwater elevation. Well caps were removed before gauging to allow groundwater levels to equilibrate. An oil/water interface probe was used to measure groundwater depths and check for the presence of LNAPL in each of the monitor wells. Groundwater measurements proceeded from clean wells to the wells containing LNAPL to minimize the potential for cross contamination between wells. The oil/water interface probe was cleaned with an Alconox®/de-ionized water solution and rinsed with de-ionized water after each use.

Monitor wells MW-4 (SVE-1), MW-5 (SVE-2), MW-6 (RW-4), MW-7 (RW-5), M-9 (RW-2), MW-10 (RW-6), MW-11 (RW-7), MW-12 (SVE-9), MW-13, MW-14 (SVE-11), MW-15 (SVE-12), MW-16, MW-17, MW-18 (SVE-13), MW-19, MW-20, MW-21, MW-22, MW-23, MW-24, MW-25, and SVE-10 were all measured dry. Groundwater elevations ranged from 3571.08 ft amsl at MW-26 to 3571.89 ft amsl at MW-2 (RW-1. The groundwater flow direction as measured from site wells was to the south-southeast at a gradient of approximately 0.0026 ft/ft which is generally consistent with historical data.

Table 1 presents the Groundwater Elevation Data. Figure 9 presents the Groundwater Gradient Map – September 2023.

4.8 Groundwater Sampling – September 2023

GHD personnel collected samples for the third quarter 2023 groundwater sampling event from six on-site monitor wells on September 20, 2023. Groundwater samples were collected from MW-1, MW-2 (RW-1), MW-3 (RW-3), MW-8 (SVE-5), MW-26, and MW-27. A duplicate sample was collected from MW-1.

Samples were collected via bailer method. Field parameters including pH, temp, and conductivity were collected during the purging of monitor wells. The groundwater samples were collected with clean, disposable bailers, decanted into clean containers supplied by the analytical laboratory, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The coolers were sealed for transport and shipped to Pace Analytical Laboratories (Pace) of Mount Juliet, TN under chain of custody protocol. Groundwater not used for sampling is stored on-site in a 140-barrel above ground storage tank, for off-site disposal.

Pace analyzed the groundwater samples for:

– BTEX by EPA Method 8260B;
– TPH-GRO by EPA Method 8015B;
– TPH-DRO by EPA Method 8015B; and
– Chloride by EPA Method 300.

4.9 Groundwater Analytical Results – September 2023

Sample results for the September 2023 quarterly groundwater monitoring events are summarized below.

– Benzene was detected above the groundwater remedial objective of 0.01 mg/L in groundwater samples collected at MW-1, MW-2, MW-3 at concentrations of 0.0111 mg/L at MW-3, to 0.144 mg/L at MW-2, respectively. Benzene was not detected above the remedial objective in the remaining monitor wells.
– Toluene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the September 2023 sampling event.
– Ethylbenzene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the September 2023 sampling event.
– Total xylenes were not detected above the groundwater remedial objective of 0.62 mg/L in groundwater samples collected during the September 2023 sampling event.
– TPH-GRO was detected above the laboratory detection limit in groundwater samples MW-2 at 2.67 mg/L, MW-8 (SVE-5) at 85.5 mg/L. Groundwater remedial objectives for TPH-GRO have not been established for the site.
– TPH-DRO was detected above the laboratory detection limit in groundwater samples MW-1 at 8.71 mg/L, MW-2 at 2.31 mg/L, MW-3 at 1.70 mg/L, MW-8 (SVE-5) at 138 mg/L, MW-26 at 0.197 mg/L and MW-27 at 0.299. Groundwater remedial objectives for TPH-DRO have not been established for the site.
– Chloride was not detected above the groundwater remedial objective of 250 mg/L in any groundwater samples collected during the September 2023 sampling event.

Table 2 presents Groundwater Analytical Data – BTEX, TPH-GRO and TPH-DRO and Table 3 presents Groundwater Analytical Data – Inorganics. Figure 10 presents Groundwater Analytical Results – Organics – September 2023; Figure 11 presents Groundwater Analytical Results – Inorganics – September 2023. The Pace analytical reports are presented as Appendix B.

4.10 Groundwater Monitoring – December 2023

GHD personnel gauged 28 on-site monitor wells on December 19, 2023 to measure groundwater elevation. Well caps were removed before gauging to allow groundwater levels to equilibrate. An oil/water interface probe was used to measure groundwater depths and check for the presence of LNAPL in each of the monitor wells. Groundwater measurements proceeded from clean wells to the wells containing LNAPL to minimize the potential for cross

contamination between wells. The oil/water interface probe was cleaned with an Alconox®/de-ionized water solution and rinsed with de-ionized water after each use.

Monitor wells MW-4 (SVE-1) through MW-7 (RW-5), MW-10 (RW-6) through MW-23, MW-25, and SVE-10 were all measured dry. Groundwater elevations ranged from 3570.77 ft amsl at well MW-8 (SVE-5) to 3575.49 ft amsl at MW-9 (RW-2). The groundwater flow direction as measured from site wells was to the southeast at a gradient of approximately 0.0023 ft/ft and is generally consistent with historical data.

Table 1 presents the Groundwater Elevation Data. Figure 12 presents Groundwater Gradient Map – December 2023.

4.11 Groundwater Sampling – December 2023

GHD personnel collected samples for the fourth quarter 2023 groundwater sampling event from five on-site monitor wells on December 19, 2023. Groundwater samples were collected from MW-1, MW-2, MW-3, MW-26, and MW-27. A duplicate sample was collected from MW-27.

Samples were collected via bailer method. Field parameters including pH, temp, and conductivity were collected during the purging of monitor wells. The groundwater samples were collected with clean, disposable bailers, decanted into clean containers supplied by the analytical laboratory, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The coolers were sealed for transport and shipped to Pace under chain of custody protocol. Purge water is stored on-site in a 140-barrel above ground storage tank, for off-site disposal.

Pace analyzed the groundwater samples for:

– Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260B;
– TPH-GRO by EPA Method 8015B;
– TPH-DRO by EPA Method 8015B; and
– Chloride by EPA Method 300.

4.12 Groundwater Analytical Results – December 2023

Sample results for the December 2023 quarterly groundwater monitoring event are summarized below.

– Benzene was detected at concentrations above the groundwater remedial objective of 0.010 mg/L in MW-1 and MW-2 at concentrations of 0.031 mg/L and 0.028 mg/L, respectively. Benzene was not detected above the remedial objective in the remaining monitor wells during the December sampling event.
– Toluene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the December 2023 sampling event.
– Ethylbenzene was not detected above the groundwater remedial objective of 0.75 mg/L in groundwater samples collected during the December 2023 sampling event.
– Total xylenes were not detected above the groundwater remedial objective of 0.62 mg/L in groundwater samples collected during the December 2023 sampling event.
– TPH-GRO was detected above the laboratory detection limit in groundwater samples MW-1 and MW-2 at concentrations of 0.96 mg/L and 1.65 mg/L, respectively. Groundwater remedial objectives for TPH-GRO have not been established for the Site.
– TPH-DRO was detected above the laboratory detection limit in groundwater samples MW-1, MW-2, and MW-3. The highest concentration of TPH-DRO was reported as 8.0 mg/L in the sample taken at MW-1. Groundwater remedial objectives for TPH-DRO have not been established for the site.
– Chloride was not detected above the groundwater remedial objective of 250 mg/L in any of the wells sampled during the December 2023 event.

Table 2 presents Groundwater Analytical Data – BTEX, TPH-GRO and TPH-DRO; Table 3 presents Groundwater Analytical Data – Inorganics. Figure 13 presents Groundwater Analytical Results – Organics – December 2023;

Figure 14 presents Groundwater Analytical Results – Inorganics – December 2023. The Pace analytical reports are presented as Appendix B.

5. Groundwater Remediation Activities

Following the December 2022 Deep Earth Technologies, Inc (DTI) direct well injections of Cool-Ox® event, post injection monitoring and sampling continued into 2023 as specified in the Cool-Ox® work plan submitted by GHD. The site monitoring wells were gauged approximately 30 days after treatment, field parameters were collected approximately 60 days after treatment, field parameters and groundwater samples for heterotrophic plate counts were collected approximately 90 days after treatment. The Eurofins Analytical Report for the is included in Appendix B and the DTI Application Report is presented as Appendix C.

Groundwater quality parameters collected include temperature, specific conductivity, pH, dissolved oxygen (DO), and oxidation reduction potential (ORP). Pre-injection analytical results and groundwater quality parameters are compared to 90-day post-injection analytical results and groundwater quality parameters and are presented on the table below:

Date	Well ID	Heterotrophic Plate Count (CFU/mL)	Temperature (ºC)	Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)
12/5/22	MW-1	<10	20.13	6404	12.67	26.71	-46.4
12/5/22	MW-2	20	19.92	5063	12.50	23.33	-63.3
12/5/22	MW-3	10	19.90	3602	12.43	24.38	-48.1
12/5/22	MW-6	Dry					
12/5/22	MW-8	20000	19.81	966	7.02	1.85	-120.9
3/22/23	MW-1	<10	27.99	8131	12.53	22.79	-31.7
3/22/23	MW-2	<10	22.12	8202	12.69	21.03	-61.3
3/22/23	MW-3	<10	23.81	8870	19.52	19.52	-57.5
3/22/23	MW-6	Dry					
3/22/23	MW-8	Dry					
3/22/23	MW-9	Dry					

Compliance groundwater samples were collected in all four quarters of 2023 following the Cool-Ox® event and will continue quarterly through 2024.

6. Summary of Corrective Action Activities and Recommendations

LNAPL was last observed at the site in September 2021 in well MW-9 and was not observed during all four quarterly sampling events in 2023. Collecting eight quarters of groundwater data without the presence of LNAPL remains the remedial objective for this site. If the site can demonstrate eight quarters of groundwater monitoring activities without the presence of LNAPL then a risk-based closure application will be submitted to NMOCD.

Groundwater monitoring data collected from MW-1 and MW-2 during March, June, September and December of 2023 demonstrate benzene levels exceeding the 1996 NMWQCC standards but appear to be trending downwards. Monitor well MW-3 also recorded one benzene exceedance within the same sampling year. As part of our ongoing efforts, GHD will continue to monitor the site on a quarterly basis, allowing for potential progress toward monitored natural attenuation.

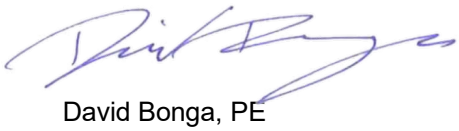
In response to requests from GHD and P66, the NMOCD approved the discontinuance of chloride monitoring at all site wells except MW-11, MW-17, and MW-21 following the 2022 Groundwater Monitoring and Remediation Report. This was based on significant data consistently showing below the NMWQCC standard for chloride of 250 mg/L.

GHD will continue groundwater monitoring on a quarterly basis through 2024 and reporting on an annual basis for the site, as directed by the NMOCD.

All of which is Respectfully Submitted,

GHD

Erin Sullivan
Project Manager



David Bonga, PE
Project Director

Figures

0 300 600 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

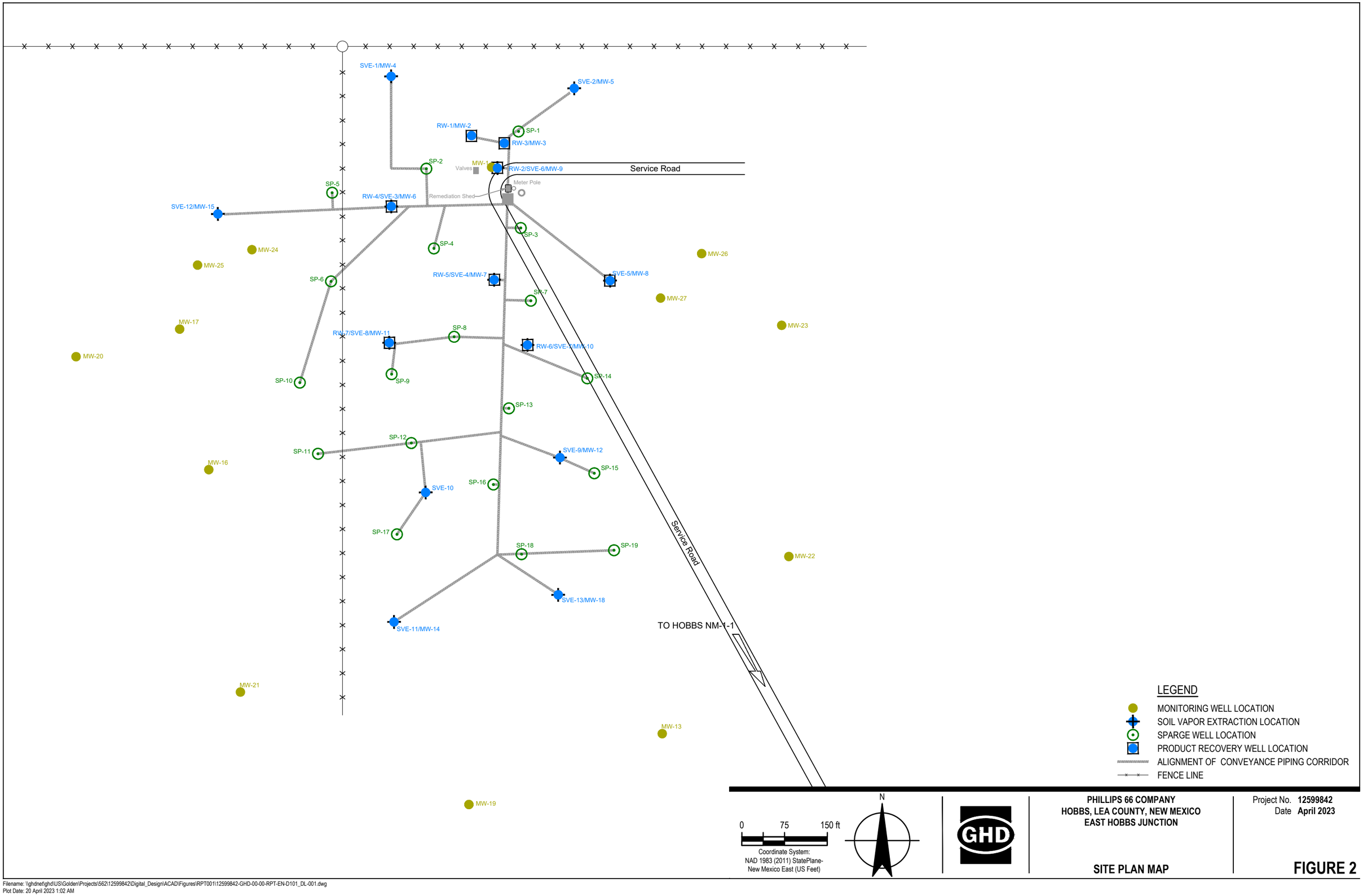
Project No. 12599842
Date April 2023

SITE AERIAL MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plotted: [illegible]

Data Source: Microsoft Product Screen shot(s) Reprinted with permission from Microsoft Corporation
Lat/Long: 32.681° North, 103.165° West



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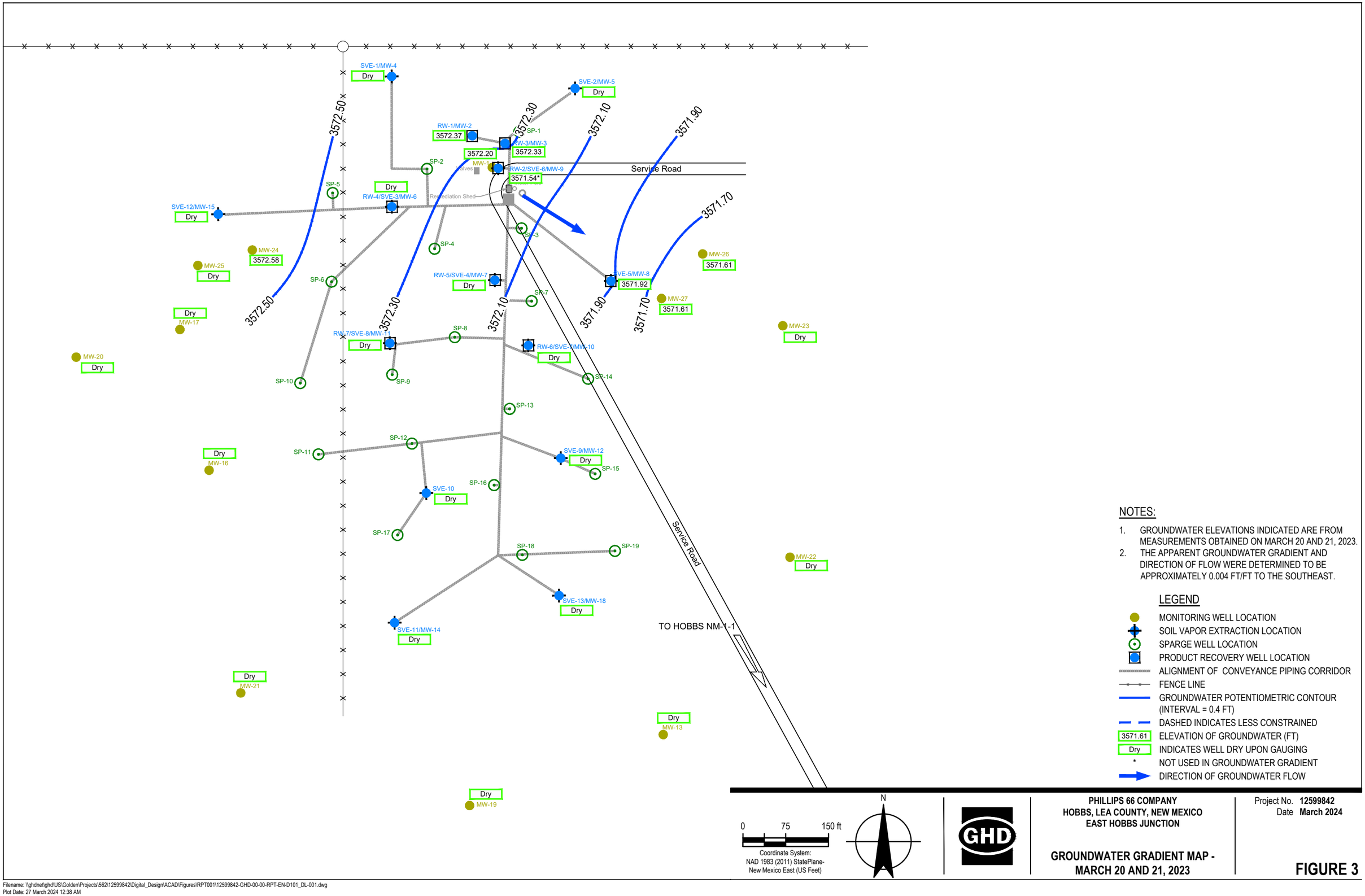

NOTES:

1. GROUNDWATER ELEVATIONS INDICATED ARE FROM MEASUREMENTS OBTAINED ON MARCH 20 AND 21, 2023.
2. THE APPARENT GROUNDWATER GRADIENT AND DIRECTION OF FLOW WERE DETERMINED TO BE APPROXIMATELY 0.004 FT/FT TO THE SOUTHEAST.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 0.4 FT)
- DASHED INDICATES LESS CONSTRAINED
- 3571.61 ELEVATION OF GROUNDWATER (FT)
- Dry INDICATES WELL DRY UPON GAUGING
- * NOT USED IN GROUNDWATER GRADIENT
- DIRECTION OF GROUNDWATER FLOW

0 75 150 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER GRADIENT MAP -
MARCH 20 AND 21, 2023

Project No. **12599842**
Date **March 2024**

FIGURE 3

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D101_DL-001.dwg
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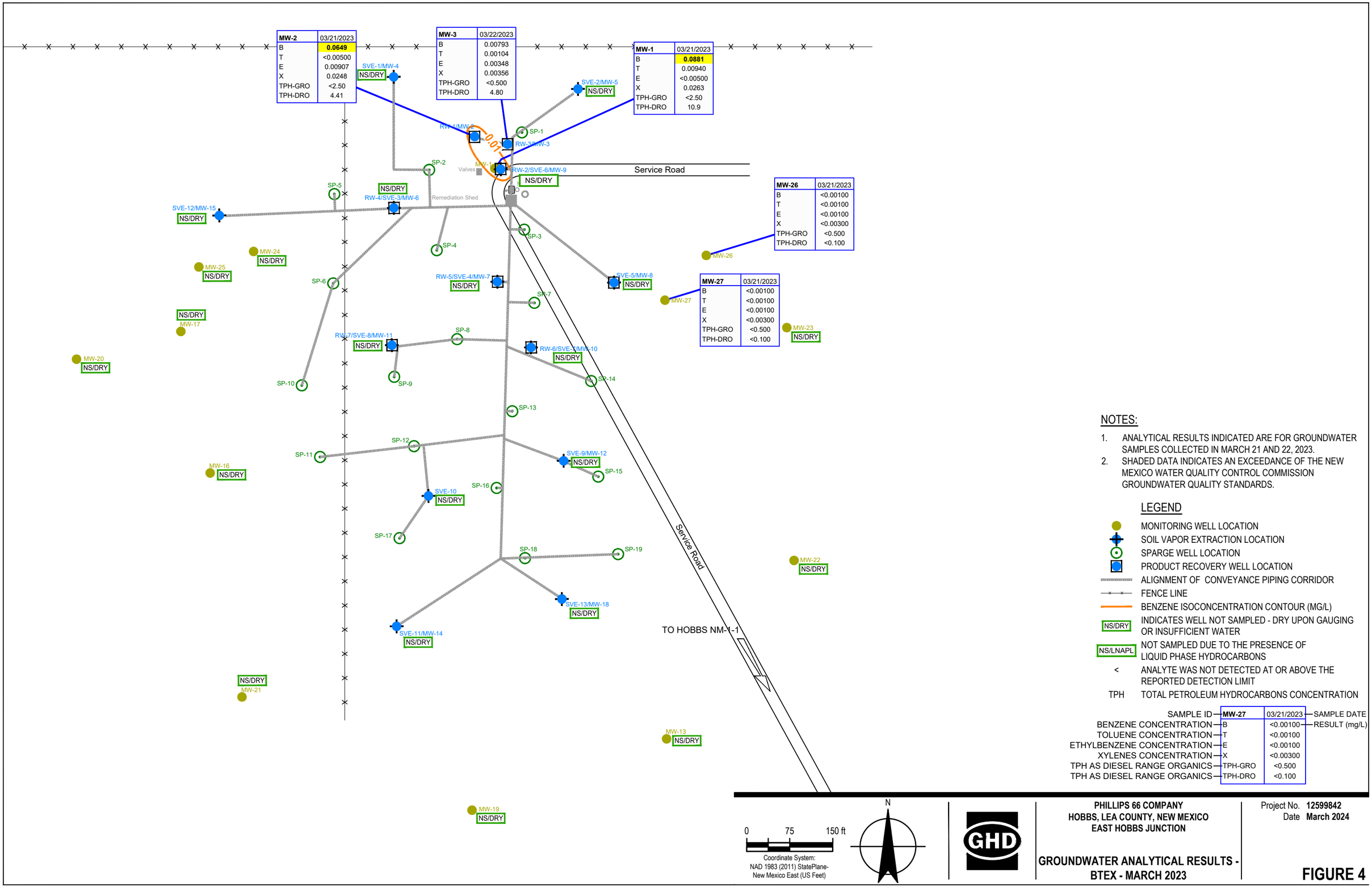

NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN MARCH 21 AND 22, 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- BENZENE ISOCONCENTRATION CONTOUR (MG/L)
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION

SAMPLE ID	MW-27	03/21/2023	SAMPLE DATE
BENZENE CONCENTRATION	B	<0.00100	RESULT (mg/L)
TOLUENE CONCENTRATION	T	<0.00100	
ETHYLBENZENE CONCENTRATION	E	<0.00100	
XYLENES CONCENTRATION	X	<0.00300	
TPH AS DIESEL RANGE ORGANICS	TPH-GRO	<0.500	
TPH AS DIESEL RANGE ORGANICS	TPH-DRO	<0.100	

0 75 150 ft

Coordinate System: NAD 1983 (2011) StatePlane- New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - BTEX - MARCH 2023

Project No. 12599842
Date March 2024

FIGURE 4

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D101_DL-001.dwg
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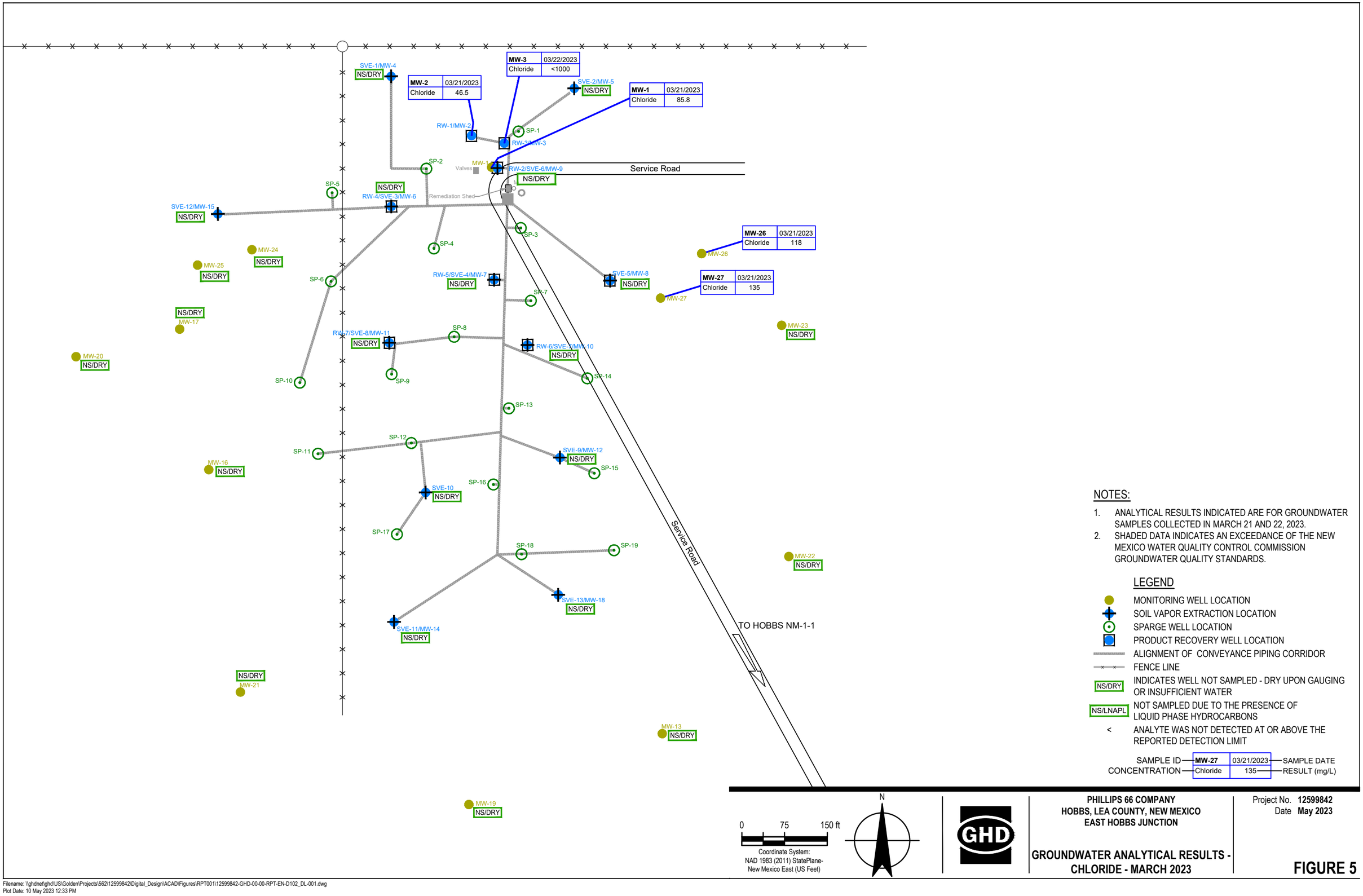


NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN MARCH 21 AND 22, 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

SAMPLE ID — MW-27 | 03/21/2023 — SAMPLE DATE
CONCENTRATION — Chloride | 135 — RESULT (mg/L)

0 75 150 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

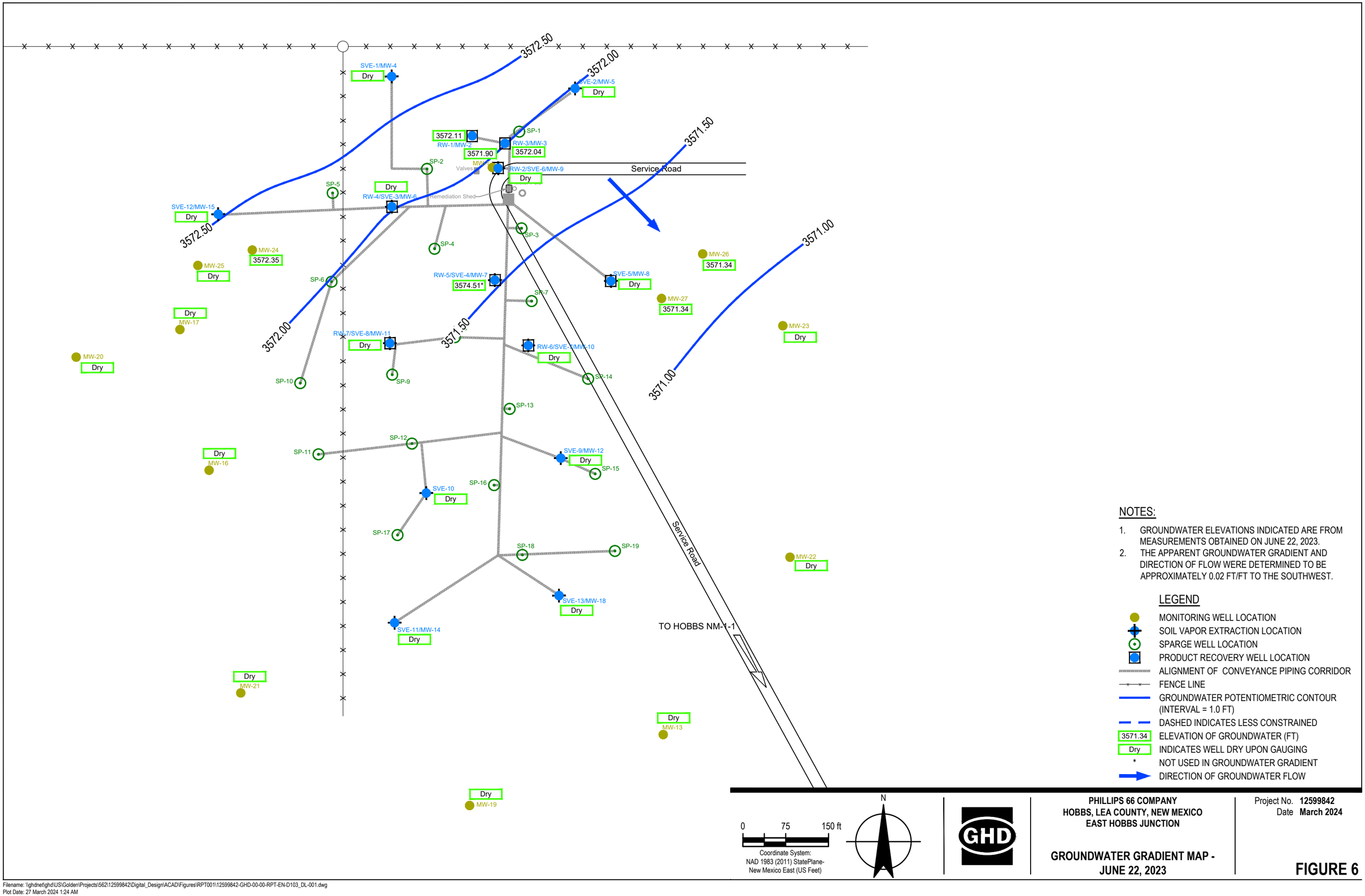
PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - CHLORIDE - MARCH 2023

Project No. 12599842
Date May 2023

FIGURE 5

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D102_DL-001.dwg
Plot Date: 10 May 2023 12:33 PM



NOTES:

1. GROUNDWATER ELEVATIONS INDICATED ARE FROM MEASUREMENTS OBTAINED ON JUNE 22, 2023.
2. THE APPARENT GROUNDWATER GRADIENT AND DIRECTION OF FLOW WERE DETERMINED TO BE APPROXIMATELY 0.02 FT/FT TO THE SOUTHWEST.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 1.0 FT)
- DASHED INDICATES LESS CONSTRAINED
- 3571.34 ELEVATION OF GROUNDWATER (FT)
- Dry INDICATES WELL DRY UPON GAUGING
- * NOT USED IN GROUNDWATER GRADIENT
- DIRECTION OF GROUNDWATER FLOW

0 75 150 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER GRADIENT MAP - JUNE 22, 2023

Project No. **12599842**
Date **March 2024**

FIGURE 6

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D103_DL-001.dwg
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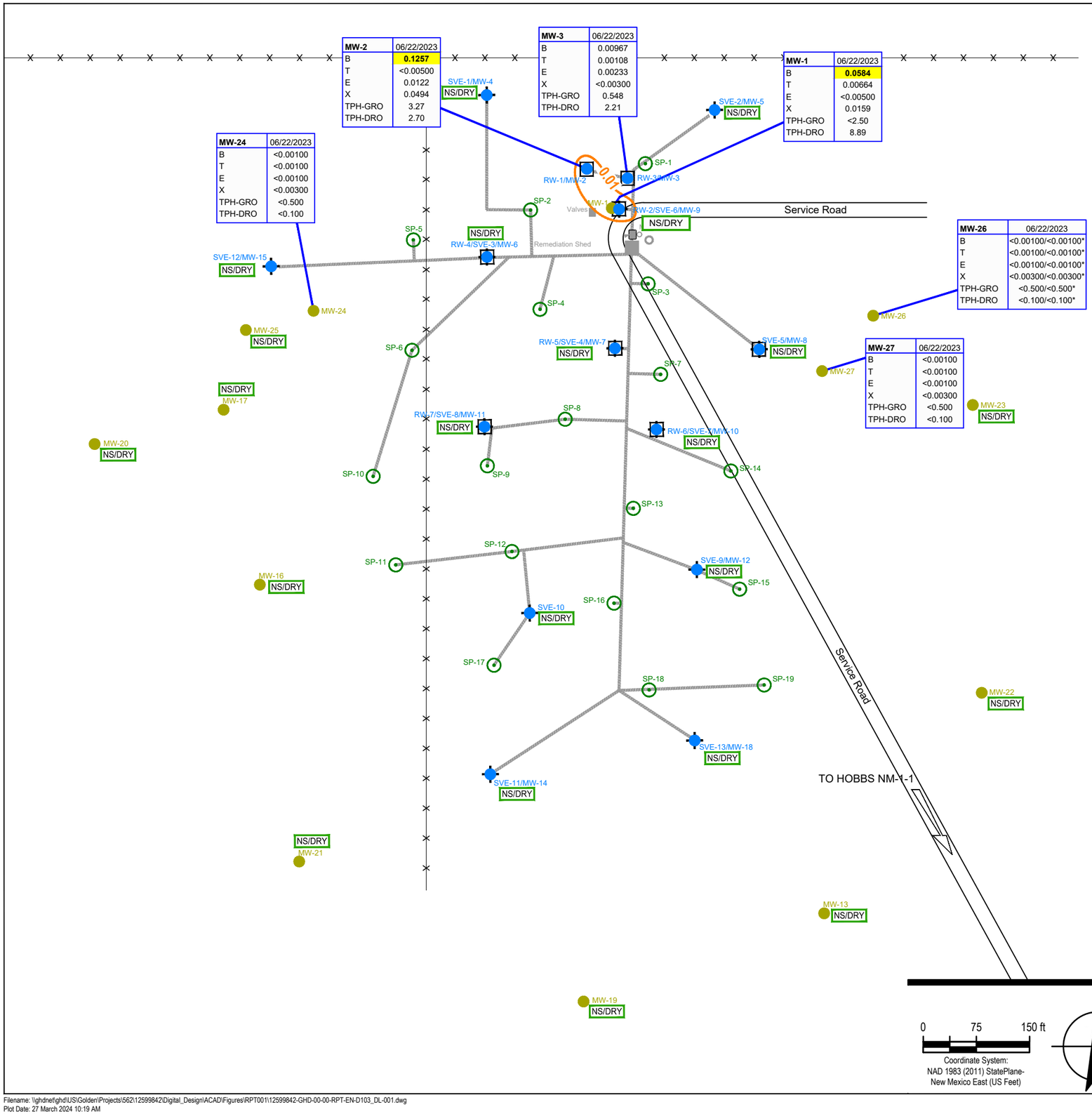


NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN MARCH 21 AND 22, 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- BENZENE ISOCONCENTRATION CONTOUR (MG/L)
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- * — INDICATES DUPLICATE SAMPLE
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION

SAMPLE ID	MW-27	06/22/2023	SAMPLE DATE
BENZENE CONCENTRATION	B	<0.00100	RESULT (mg/L)
TOLUENE CONCENTRATION	T	<0.00100	
ETHYLBENZENE CONCENTRATION	E	<0.00100	
XYLENES CONCENTRATION	X	<0.00300	
TPH AS DIESEL RANGE ORGANICS	TPH-GRO	<0.500	
TPH AS DIESEL RANGE ORGANICS	TPH-DRO	<0.100	

0 75 150 ft

Coordinate System: NAD 1983 (2011) StatePlane- New Mexico East (US Feet)

N

GHD

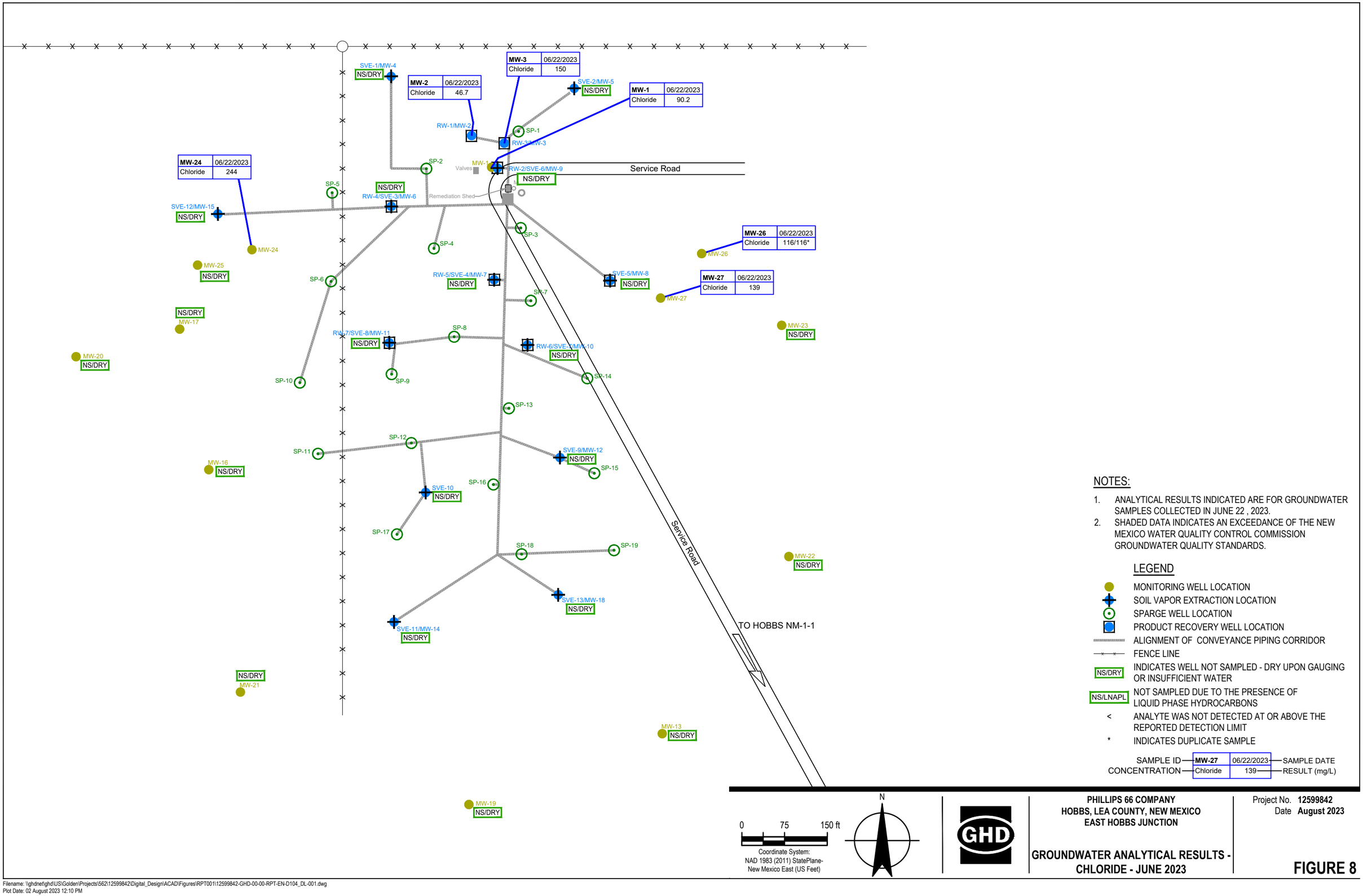
PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - BTEX - JUNE 2023

Project No. 12599842
Date March 2024

FIGURE 7

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D103_DL-001.dwg
Plot Date: 27 March 2024 10:19 AM



NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN JUNE 22 , 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- * — INDICATES DUPLICATE SAMPLE

SAMPLE ID	**MW-27**	06/22/2023	SAMPLE DATE
CONCENTRATION	Chloride	139	RESULT (mg/L)

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - CHLORIDE - JUNE 2023

Project No. **12599842**
Date **August 2023**

FIGURE 8

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT001\12599842-GHD-00-00-RPT-EN-D104_DL-001.dwg
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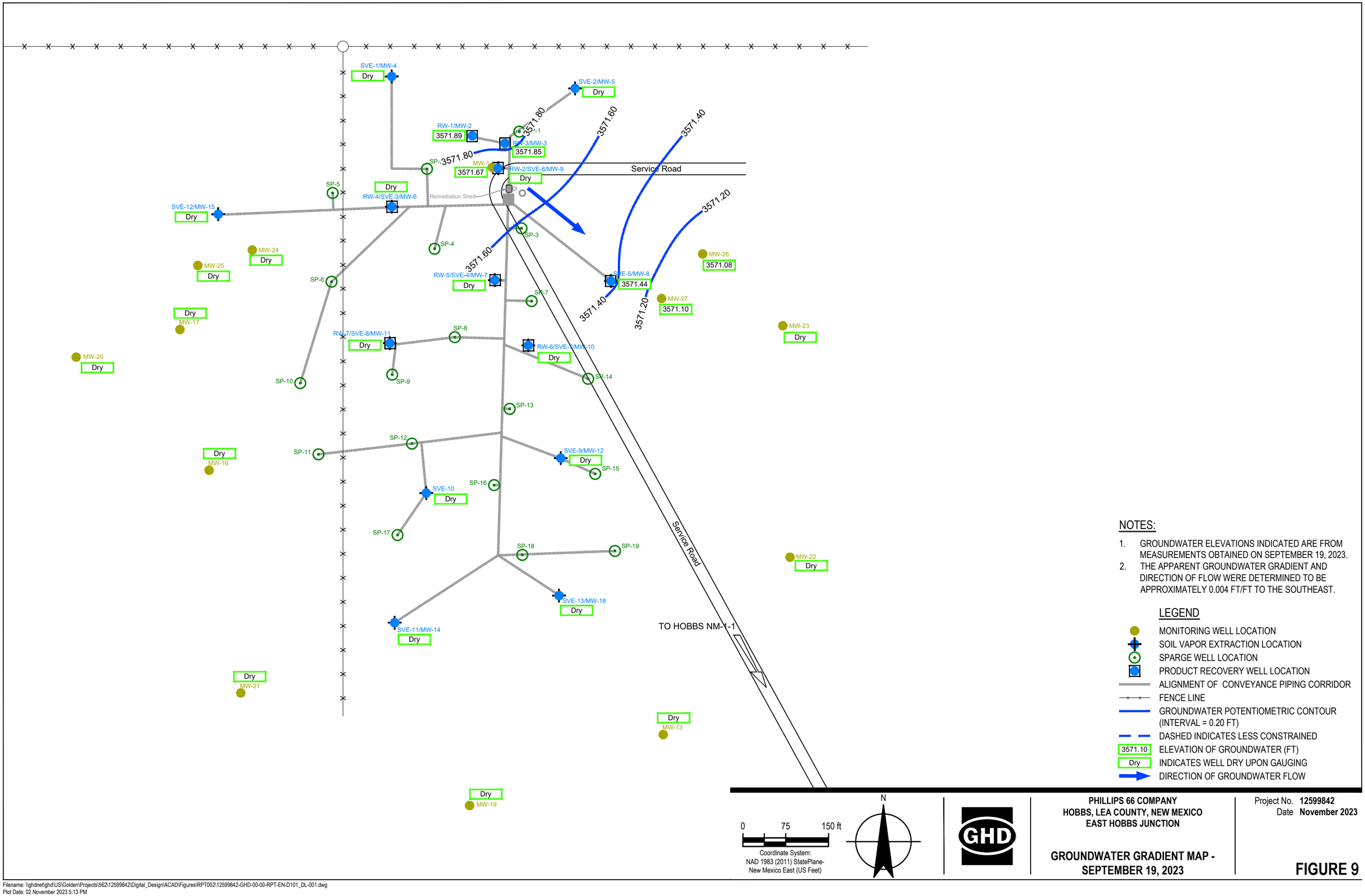

NOTES:

1. GROUNDWATER ELEVATIONS INDICATED ARE FROM MEASUREMENTS OBTAINED ON SEPTEMBER 19, 2023.
2. THE APPARENT GROUNDWATER GRADIENT AND DIRECTION OF FLOW WERE DETERMINED TO BE APPROXIMATELY 0.004 FT/FT TO THE SOUTHEAST.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 0.20 FT)
- DASHED INDICATES LESS CONSTRAINED
- 3571.10 ELEVATION OF GROUNDWATER (FT)
- Dry INDICATES WELL DRY UPON GAUGING
- DIRECTION OF GROUNDWATER FLOW

0 75 150 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER GRADIENT MAP - SEPTEMBER 19, 2023

Project No. **12599842**
Date **November 2023**

FIGURE 9

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D101_DL-001.dwg
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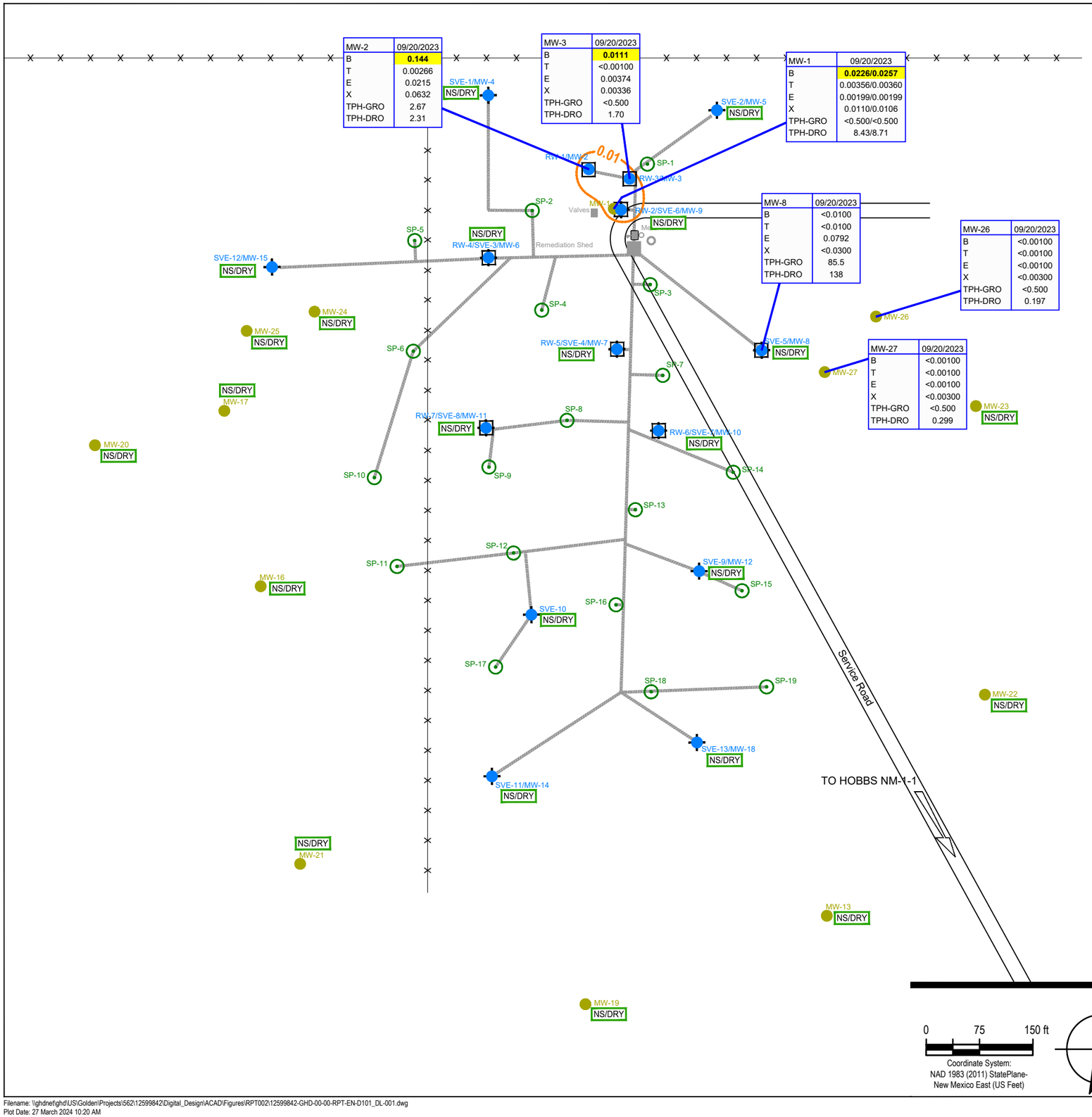


NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN SEPTEMBER 20, 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- BENZENE ISOCONCENTRATION CONTOUR (MG/L)
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- 8.43/8.71 — INDICATES DUPLICATE SAMPLE
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION

SAMPLE ID	MW-27	09/20/2023	SAMPLE DATE
BENZENE CONCENTRATION	B	<0.00100	RESULT (mg/L)
TOLUENE CONCENTRATION	T	<0.00100	
ETHYLBENZENE CONCENTRATION	E	<0.00100	
XYLENES CONCENTRATION	X	<0.00300	
TPH AS DIESEL RANGE ORGANICS	TPH-GRO	<0.500	
TPH AS DIESEL RANGE ORGANICS	TPH-DRO	0.299	

0 75 150 ft

Coordinate System: NAD 1983 (2011) StatePlane- New Mexico East (US Feet)

N

GHD

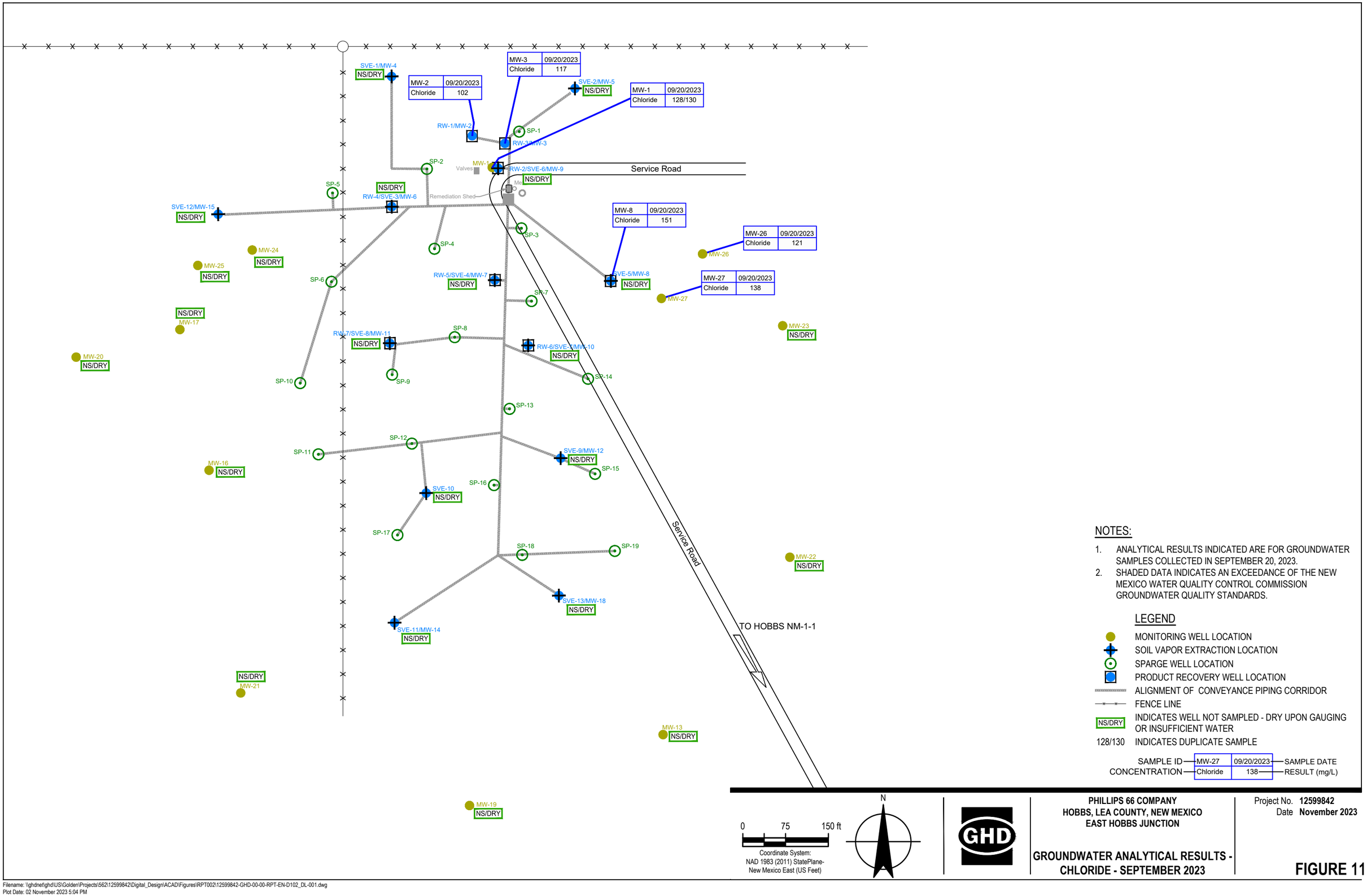
PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - BTEX - SEPTEMBER 2023

Project No. **12599842**
Date **March 2024**

FIGURE 10

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 27 March 2024 10:20 AM



NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN SEPTEMBER 20, 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- 128/130 — INDICATES DUPLICATE SAMPLE

SAMPLE ID — MW-27 | 09/20/2023 — SAMPLE DATE
CONCENTRATION — Chloride | 138 — RESULT (mg/L)

0 75 150 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - CHLORIDE - SEPTEMBER 2023

Project No. **12599842**
Date **November 2023**

FIGURE 11

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D102_DL-001.dwg
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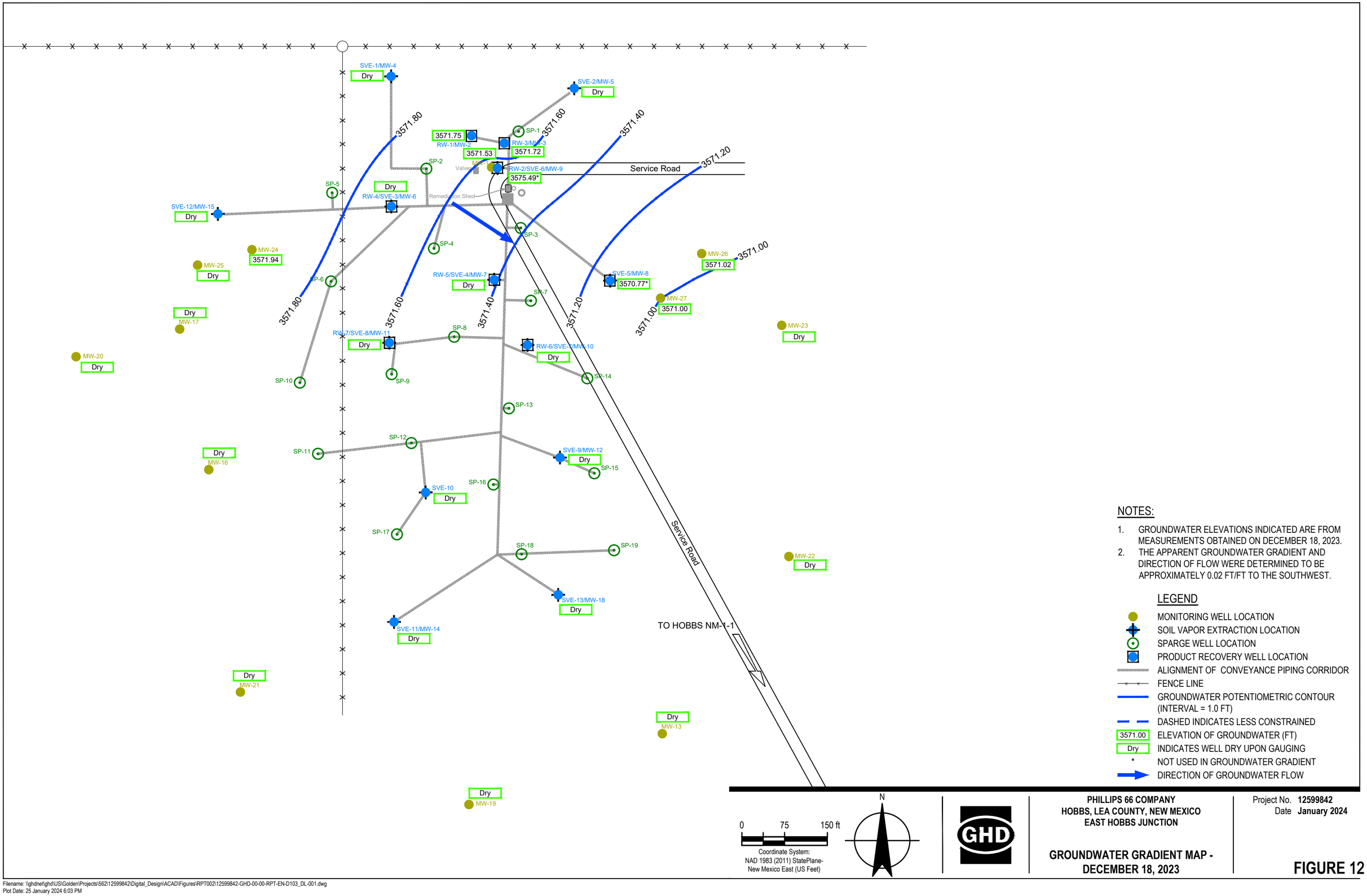

NOTES:

1. GROUNDWATER ELEVATIONS INDICATED ARE FROM MEASUREMENTS OBTAINED ON DECEMBER 18, 2023.
2. THE APPARENT GROUNDWATER GRADIENT AND DIRECTION OF FLOW WERE DETERMINED TO BE APPROXIMATELY 0.02 FT/FT TO THE SOUTHWEST.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- GROUNDWATER POTENTIOMETRIC CONTOUR (INTERVAL = 1.0 FT)
- DASHED INDICATES LESS CONSTRAINED
- 3571.00 ELEVATION OF GROUNDWATER (FT)
- Dry INDICATES WELL DRY UPON GAUGING
- * NOT USED IN GROUNDWATER GRADIENT
- DIRECTION OF GROUNDWATER FLOW

0 75 150 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER GRADIENT MAP - DECEMBER 18, 2023

Project No. **12599842**
Date **January 2024**

FIGURE 12

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D103_DL-001.dwg
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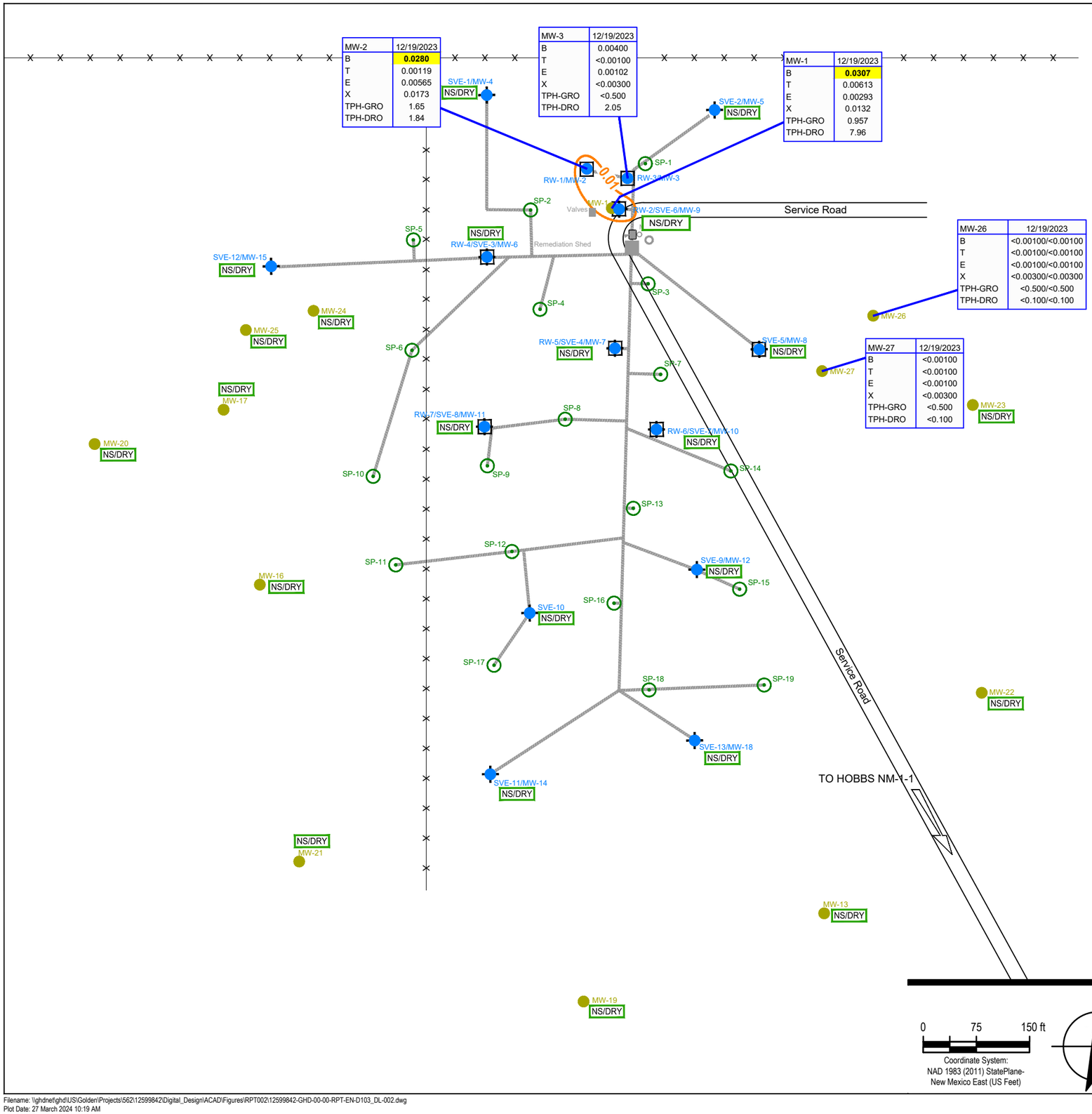

NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN DECEMBER 19, 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- BENZENE ISOCONCENTRATION CONTOUR (MG/L)
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- * — INDICATES DUPLICATE SAMPLE
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION

SAMPLE ID	MW-27	12/19/2023	SAMPLE DATE
BENZENE CONCENTRATION	B	<0.00100	RESULT (mg/L)
TOLUENE CONCENTRATION	T	<0.00100	
ETHYLBENZENE CONCENTRATION	E	<0.00100	
XYLENES CONCENTRATION	X	<0.00300	
TPH AS DIESEL RANGE ORGANICS	TPH-GRO	<0.500	
TPH AS DIESEL RANGE ORGANICS	TPH-DRO	<0.100	

0 75 150 ft

Coordinate System: NAD 1983 (2011) StatePlane- New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

GROUNDWATER ANALYTICAL RESULTS - BTEX - DECEMBER 2023

Project No. 12599842
Date March 2024

FIGURE 13

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D103_DL-002.dwg
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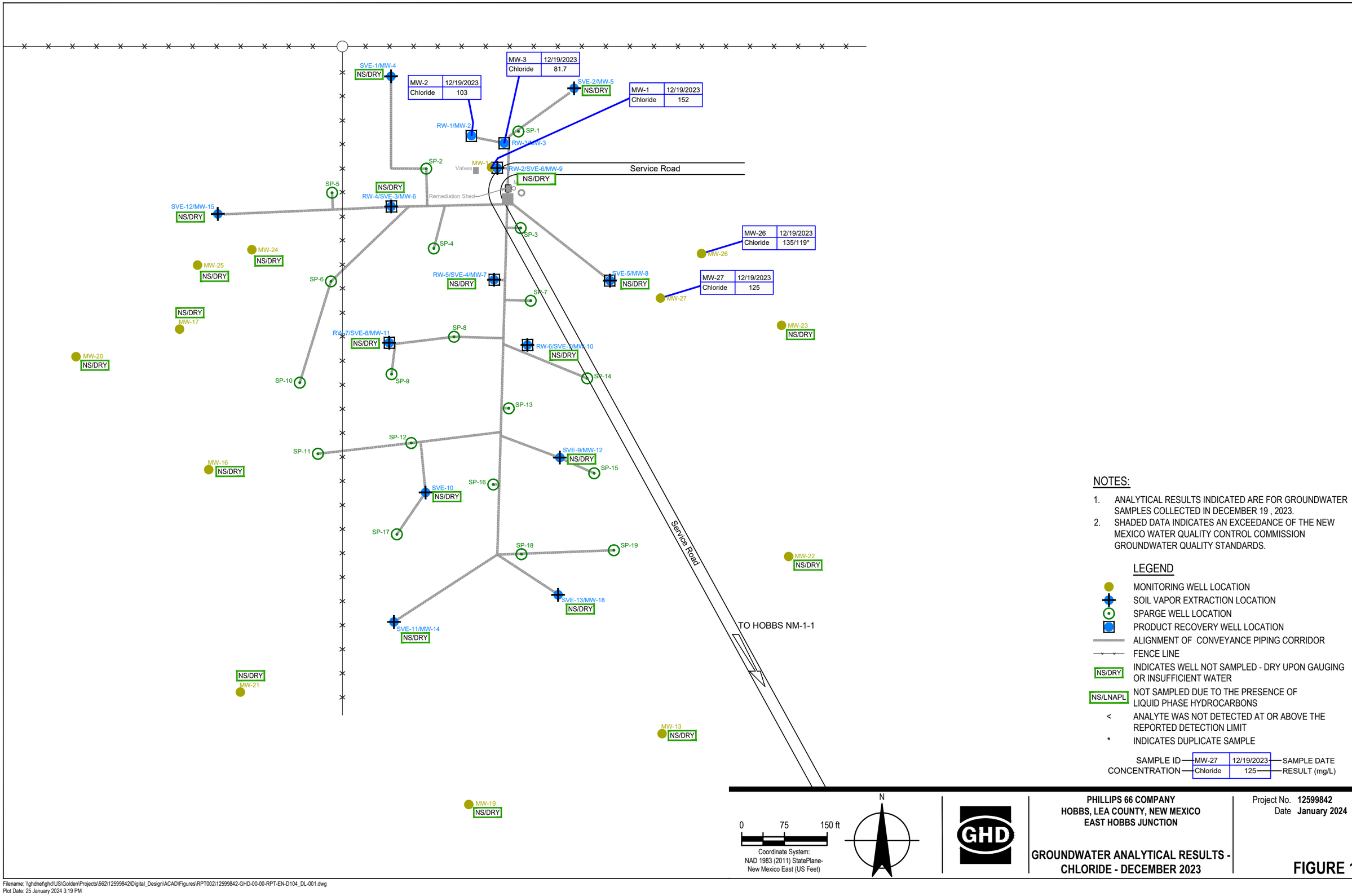

NOTES:

1. ANALYTICAL RESULTS INDICATED ARE FOR GROUNDWATER SAMPLES COLLECTED IN DECEMBER 19 , 2023.
2. SHADED DATA INDICATES AN EXCEEDANCE OF THE NEW MEXICO WATER QUALITY CONTROL COMMISSION GROUNDWATER QUALITY STANDARDS.

LEGEND

- MONITORING WELL LOCATION
- SOIL VAPOR EXTRACTION LOCATION
- SPARGE WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE
- NS/DRY — INDICATES WELL NOT SAMPLED - DRY UPON GAUGING OR INSUFFICIENT WATER
- NS/LNAPL — NOT SAMPLED DUE TO THE PRESENCE OF LIQUID PHASE HYDROCARBONS
- < — ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- * — INDICATES DUPLICATE SAMPLE

SAMPLE ID	MW-27	12/19/2023	SAMPLE DATE
CONCENTRATION	Chloride	125	RESULT (mg/L)

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D104_DL-001.dwg
Plot Date: 25 January 2024 3:19 PM

LEGEND

- MONITORING WELL LOCATION
- PRODUCT RECOVERY WELL LOCATION
- SPARGE WELL LOCATION
- ALIGNMENT OF CONVEYANCE PIPING CORRIDOR
- FENCE LINE

0 15 30 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

PHILLIPS 66 COMPANY
HOBBS, LEA COUNTY, NEW MEXICO
EAST HOBBS JUNCTION

Project No. **12599842**
Date **March 2024**

REMEDIAL INJECTION PLAN

FIGURE 15

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12599842\Digital_Design\ACAD\Figures\RPT002\12599842-GHD-00-00-RPT-EN-D105_DL-002.dwg
Plot Date: 27 March 2024 2:17 AM

Data Source: Image © 2022 Google - Imagery Date: February 20, 2019
Lat/Long: 32.681459° North, 103.165464° West

Tables

Appendices

Appendix A

New Mexico Water Quality Control Commission Standards (NMWQCC-20.6.2.3103) effective November 15, 1996

Appendix B

Laboratory Analytical Reports

Appendix C

DTI Application Report

DeepEarth Technologies, Inc.

DeepEarth Technologies, Inc.
(708) 396-0100
tech@cool-ox.com

A Report for the Application of

Cool-Ox®

Controlled In-Situ Chemical Oxidation Technology

Prepared for

David Bonga, PE

GHD

200 W Allegan Street

Suite 300,

Plainwell, MI 49080

Project

P66 – East Hobbs Junction

Hobbs, NM

Date 1/19/2023

DTI Project #2331 R-1

Client: GHD

Attn: David Bonga, PE

Site: P66 – East Hobbs Junction

Introduction:

DeepEarth Technologies, Inc. (DTI) had been invited by GHD to implement a remedial program to treat groundwater contamination associated with LNAPL/BTEX at the P66 East Hobbs Junction facility in Hobbs, NM.

Summary:

It is the goal of this project to use the *Cool-Ox*® reagent to treat the target pollutants and reduce their concentrations to the maximum extent possible. The work scope of the project consisted of injecting up to 6,500 gallons of *Cool-Ox*® reagent into 13 injection wells using DTI's *Deep-Shot*™ trailer. DTI incorporated a well Injection method by constructing manifold systems to attach on top of wells.

Application:

On 12/5/22, DTI mobilized to the site to conduct a survey of the treatment areas and to coordinate on-site application activities. DTI personnel met with GHD representatives and held a Site-Specific Health and Safety (SSH&S) meeting, wherein all points concerning general and specific safety requirements of the client and DTI were discussed and understood. DTI then moved application equipment into position and prepared to treat the Hobbs Junction site. Due to the late arrival of material shipment, DTI and GHD onsite personnel decided to begin injections the following day.

On 12/6/22, DTI returned to the site and began injection activities once all injection equipment and materials were ready. DTI injected 1,100 gallons of *Cool-Ox*® reagent into 5 injection wells.

On 12/7/22, DTI returned to the site and applied 905 gallons of *Cool-Ox*® reagent into 8 wells. Some high pressure was noted as was good reactions at the surface.

On 12/8/22, DTI applied 700 gallons of *Cool-Ox®* reagent into 10 wells. Pressure outs and good reactions were noted.

On 12/9/22 DTI applied 695 gallons of *Cool-Ox®* reagent into 5 wells. Additional well locations were made available for DTI to utilize as injection well locations per GHD's PM.

On 12/12/22 DTI applied 935 gallons of *Cool-Ox®* reagent into 10 wells. Many received minimal gallons and pressured out.

On 12/13/22 DTI applied 1,000 gallons of *Cool-Ox®* reagent into 4 wells.

On 12/14/22 DTI applied 700 gallons of *Cool-Ox®* reagent into 2 wells. Once injection activities were completed, DTI cleaned up the injection and equipment staging areas, collected all materials and trash, then mobilized off site. Post treatment pictures were taken by DTI's onsite supervisor of the injection areas.

A total of 6,035 gallons of *Cool-Ox®* was injected into 15 wells using injection manifolds placed on the top of the monitoring well. As injection activities progressed, DTI increased the overall concentration of the *Cool-Ox®* reagent in order to reduce the overall total gallonage while still delivering the appropriate volume of active oxidizer. Please refer to the enclosed Figure 9 for injection locations. During injection activities, surfacing material was noted at select wells. DTI believes that significant reagent will migrate into fractures and reduce contaminants in the soil and groundwater.

Cool-Ox®

Field Service Group -- *Cool-Ox®* Site Application Report

Photos:

Conclusions:

DTI believes that in the treatment area, significant reductions of contaminants will be accomplished. DTI believes that the subsequent biological activity associated with all *Cool-Ox*® injections will produce on-going remedial activity. DTI's Site Safety program was implemented at the onset of operations and no reportable incidents were suffered.

DTI would like to thank GHD for choosing the *Cool-Ox*® Technology to remediate the P66 East Hobbs Junction site. Should you have any questions or comments, please call or email via the information below.

Sincerely,

James Gainey
Operations Manager
DeepEarth Technologies, Inc.
Direct: 770-547- 5335
james@cool-ox.com

Filename: \\ghdnet\ghd\US\Golden\Projects\562\12574669\Digital_Design\ACAD\Figures\RPT001\12574669-GHD-0000-RPT-EN-0105_DL-001.dwg
Plot Date: 22 December 2022 1:23 PM

Data Source: Image © 2022 Google - Imagery Date: March 20, 2019
Lat/Long: 32.681° North, 103.165° West

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**		**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**		**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**		**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**					
Estimated Work Days:	**8**					

WELL INJECTION DATA

MW-1

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/7/2022	1210	1233	55	2.0	10	significant DL, Well not viable
TOTAL:			**55**	**2**	**10**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

MW2-RW-1

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/8/2022	754	818	50	2.0	5	DL in riser
12/9/2022	843	902	50	2.0	5	DL in riser
TOTAL:			**100**	**2**	**5**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA						
MW3-RW-3						
Date	**Start**	**End**	**Gallons**	**GPM**	**Pressure (psi)**	**Comments**
12/8/2022	715	749	50	2.0	20	DL
12/9/2022	916	927	25	2.0	10	
	936	949	25	2.0	10	DL around pad
TOTAL:			**100**	**2**	**13**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

MW-9 RW-2

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/8/2022	1520	1555	87	3.0	0	DL, product, good reaction, strong odor
	1558	1638	100	3.0	0	DL, product, good reaction, strong odor
12/9/2022	1011	1031	75	4.0	10	Product, Good Reaction
12/13/2022	735	804	100	3.5	0	DL, product, good reaction, strong odor
	1508	1550	100	2.5	10	DL, product, good reaction, strong odor
TOTAL:			**462**	**3**	**4**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA						
RW-8						Comments
Date	Start	End	Gallons	GPM	Pressure (psi)	
12/6/2022	1404	1432	75	2.5	15	NVR
	1435	1518	100	2.5	70	burped, very strong reaction
12/7/2022	712	727	25	1.5	70	
12/9/2022	804	814	20	2.0	70	pressured out
12/12/2022	1409	1419	20	2.5	70	pressured out
TOTAL:			**240**	**2**	**59**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

RW-9

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/7/2022	831	921	100	2.0	30	
	927	1014	100	2.0	50	
12/8/2022	1457	1507	13	2.0	80	pressured out
12/12/2022	1321	1332	20	2.5	70	pressured out
TOTAL:			**233**	**2**	**58**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin Sullivan	**DTI Project #:**	2331 R-1
Office:	Golden, CO	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**Phillips 66 - East Hobbs Junction**	**DTI Field Crew:**	Eric Lundy, Jeremy Duren	**PO #:**	
Location:					
Estimated Work Days:	8				

WELL INJECTION DATA				
RW-10				
Date	**Gallons**	**GPM**	**Pressure (psi)**	**Comments**
12/6/2022	100	3.5	80	1112-1148, pressured out at 80
12/8/2022	25	2.0	75	945-1004 pressured out
12/12/2022	20	2.5	70	1350-1402, pressured out
TOTAL:	**145**	**3**	**75**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**		**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**		**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**		**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**					
Estimated Work Days:	**8**					

WELL INJECTION DATA

RW-11

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/6/2022	1526	1614	100	2.5	40	NVR
12/7/2022	759	826	50	2.0	70	strong odor
12/8/2022	914	943	30	1.7	80	pressured out strong odor
12/12/2022	1305	1315	20	2.5	70	pressured out
TOTAL:			**200**	**2**	**65**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

RW-12

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/6/2022	1156	1236	100	2.0	15	NVR
	1241	1316	100	2.0	15	NVR
	1322	1336	25	2.0	80	pressured out at 80, burped and still held 80 PSI
12/7/2022	735	754	25	1.5	90	pressured out at 90 psi
12/12/2022	1338	1345	20	2.5	70	pressured out
TOTAL:			**270**	**2**	**54**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

RW-13

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/7/2022	1029	1102	100	3.5	20	
	1107	1149	100	2.0	70	pressured out at 70
12/8/2022	1016	1027	20	1.7	80	pressured out at 80 strong odor
12/12/2022	1245	1256	20	2.5	70	PRESSURED OUT
TOTAL:			**240**	**2**	**60**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin Sullivan	**DTI Project #:**	2331 R-1
Office:	Golden, CO	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**Phillips 66 - East Hobbs Junction**	**DTI Field Crew:**	Eric Lundy, Jeremy Duran	**PO #:**	
Location:					
Estimated Work Days:	8				

WELL INJECTION DATA				
RW-14				
Date	**Gallons**	**GPM**	**Pressure (psi)**	**Comments**
12/6/2022	100	4.0	40	730-759 pump, NVR
	100	2.0	45	805-850 Pump, NVR
	100	3.5	50	856-938 pump, NVR
	100	3.5	50	947-1020 pump, NVR
	100	3.5	50	1025-1057, NVR
12/8/2022	80	2.5	55	1040-1112
	100	2.5	45	1316-1356
	100	3.0	65	1401-1450
12/14/2022	100	2.5	40	835-951had to change fuel filter on pump trailer
	100	2.0	50	1003-1050
	100	2.0	50	1056-1146
TOTAL:	**1080**	**3**	**49**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

RW-16

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/7/2022	1448	1524	100	2.0	40	strong odor in burp
	1527	1614	100	2.0	100	pressured out
12/8/2022	857	908	20	2.0	100	pressured out
12/12/2022	1448	1503	20	1.7	70	pressured out
TOTAL:			**240**	**2**	**78**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**		**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**		**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**		**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**					
Estimated Work Days:	**8**					

WELL INJECTION DATA

RW-17

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/7/2022	1240	1310	50	2.0	20	(lunch from 1310-1354)
	1358	1440	100	2.0	65	
12/8/2022	835	849	25	1.5	75	good reaction, pressued out
12/12/2022	1423	1436	25	2.5	70	pressured out
TOTAL:			**200**	**2**	**58**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Eric, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

SP-1

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/9/2022	1041	1137	100	1.5	10	NVR
	1146	1238	100	2.0	30	
	1242	1350	100	2.5	20	
	1334	1414	100	2.5	20	
	1418	1500	100	3.5	20	
12/12/2022	1509	1538	70	2.0	20	
	1545	1617	100	3.5	25	
	1620	1646	100	4.5	25	
12/13/2022	1250	1329	100	2.5	20	
	1332	1410	100	2.5	20	
	1416	1459	100	2.5	20	
TOTAL:			**1070**	**3**	**21**	

DeepEarth Technologies, Inc.

Cool-Ox®

Cool-Ox® Daily Field Injection Sheet

Client:	**GHD**	**Client Personnel:**	Erin	**DTI Project #:**	2331 R-1
Office:	**Lakewood, CO**	**DTI Operations Manager:**	James Gainey	**Client Project #:**	
Site:	**P66 East Hobbs Junction**	**DTI Field Crew:**	Ericv, Jeremy	**PO #:**	
Location:	**Hobbs, NM**				
Estimated Work Days:	**8**				

WELL INJECTION DATA

SP-2

Date	Start	End	Gallons	GPM	Pressure (psi)	Comments
12/12/2022	726	840	100	1.5	60	
	845	943	100	1.8	35	
	952	1040	100	2.0	18	
	1047	1138	100	2.0	30	
	1144	1234	100	2.0	40	
12/13/2002	831	912	100	3.0	20	
	918	1005	100	3.0	20	
	1009	1053	100	2.5	40	
	1103	1148	100	2.5	30	
	1151	1235	100	2.5	30	
12/14/2022	1207	1243	100	3.0	30	
	1251	1318	100	3.5	40	
	1323	1352	100	3.5	40	
	1359	1428	100	3.5	40	
TOTAL:			**1400**	**3**	**34**	

Well #	Gallons	Average GPM	Average Pressure (psi)
MW-1	55	2	10
MW-2 RW-1	100	2	5
MW-3 RW-3	100	2	13
MW-9 RW-2	462	3	4
RW-8	240	2	59
RW-9	233	2	58
RW-10	145	3	75
RW-11	200	2	65
RW-12	270	2	54
RW-13	240	2	60
RW-14	1080	3	49
RW-16	240	2	78
RW-17	200	2	58
SP-1	1070	3	21
SP-2	1400	3	34
TOTAL:	**6035**		

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator:	OGRID:
PHILLIPS PETROLEUM CO 4001 Penbrook Odessa, TX 79762	17643
	Action Number: 327801
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Groundwater Monitoring and Remediation Report for East Hobbs Junction: Content Satisfactory 1. Continue to conduct groundwater monitoring as prescribed by OCD and as scheduled. Analyze for chloride, BTEX, and TPH (DRO, GRO). 2. If Phillips 66 is considering a "risk-based" closure as suggested in the recommendations section of this report, guidelines for submitting an alternative abatement standard petition as outlined in the provisions in 19.15.30.9 NMAC paragraph (F), subparagraphs 1 through 6 must be met to be considered.	12/24/2024
michael.buchanan	3. According to figure 8 of the annual report, all wells are dry except for 6 groundwater monitoring wells. Phillips 66 must propose a work plan to either drill dry wells deeper until groundwater levels are sufficient for sampling, submit a request for variance with justification to not sample dry wells, or propose another work plan to replace wells that have gone dry. There may be contamination in the smear zone where groundwater levels have lowered, with contamination still present in groundwater underneath the site that is not being monitored. 4. Please propose an option within ninety (90) days from receipt of this determination	12/24/2024