## Report of impacted groundwater Groundwater Monitoring in the **Second Quarter of** 2022

**Hobbs Gas Plant NMOCD AP-122** Lea County, New Mexico EMNRD Incident No. NPAC0706832026

**DCP Operating Company** 

June 27, 2022

Review of 2Q 2022 Groundwater Monitoring Summary Report: Content satisfactory

- Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8260B for all monitor wells located on-Site
- Replacement wells are scheduled to be installed during the summer of 2022 to delineate the nature and extent of hydrocarbon
- Submit third and fourth quarter reports no later than March 31, 2023.



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#### 1. Introduction

GHD Services Inc. (GHD), on behalf of DCP Operating Company (DCP), submits this Report of Groundwater Monitoring in the Second Quarter of 2022 (Report) in compliance with New Mexico Oil Conservation Division (NMOCD) of the Energy, Minerals, and Natural Resources Department (EMNRD) requirements. This Site has been assigned EMNRD Incident Number NPAC0706832026 and falls under NMOCD Abatement Plan Number AP-122. This Report provides the results of the quarterly groundwater sampling event (GWSE) completed at Hobbs Gas Plant (Site) during the second quarter of 2022 (2Q2022).

The Site is located in SW ¼, NE ¼, Section 36, Township 18 South, Range 36 East in Lea County, New Mexico. The GPS coordinates are 32.705330° N latitude and 103.306600° W longitude. A Site Location Map is provided as Figure 1. The Site details are depicted on Figure 2, Site Details Map.

#### 1.1 Site History

The Site is an inactive cryogenic gas processing plant that occupies approximately 3.5 acres surrounded by undeveloped land. The facility contained a laboratory, an amine unit, compressors, molecular sieve dehydration equipment, tank batteries, and an on-Site water production well used for non-potable water. There are seven on-Site groundwater monitor wells (MW-AR, MW-B, MW-C, MW-D, MW-E, MW-F, and MW-GR). Replacement monitor well MW-GR was drilled and constructed at the Site upon approval from New Mexico Oil Conservation Division (NMOCD) in March 2018. The DCP Apex Compressor Station (GW-163, Incident ID NAUTOFCS000131) is located approximately 750 feet to the north.

A petroleum release was first discovered when Duke Energy Field Services conducted an environmental assessment of the Site in support of a property transaction. Initial findings indicated groundwater from a newly installed monitor well near the amine skid in the southeast corner of the Site contained elevated concentrations of benzene.

## 2. Regulatory Framework

The New Mexico Administrative Code requires groundwater to be analyzed for potential contaminants as defined by the New Mexico Water Quality Control Commission (NMWQCC) Standards 20.6.2.3103 Section A, which provide Human Health Standards for Groundwater. The constituents of concern (COCs) in affected groundwater at the Site are benzene, toluene, ethylbenzene, and total xylenes (BTEX). The regulation also states that light non-aqueous liquids (LNAPL) shall not be present floating atop or immersed within groundwater, as can be reasonably measured. NMWQCC standards as shown in Table 2.1 are used to guide assessment at the Site:

Table 2.1 NMWQCC Human Health Standards in Groundwater

Analyte	NMWQCC Human Health Standard for Groundwater
Benzene	5 micrograms per liter (µg/L)
Toluene	1000 μg/L
Ethylbenzene	700 μg/L
Total Xylenes	620 μg/L

# 3. Second Quarter 2022 Groundwater Sampling Event

GHD conducted the first quarter GWSE for seven groundwater monitoring wells in June 2022. Sample locations can be viewed in the Site Details Map provided as Figure 2. All groundwater monitoring wells were sampled in accordance with the following groundwater sampling schedule as approved by the NMOCD:

Table 3.1 NMOCD-Approved Groundwater Sampling Schedule

Sample Location Identification	Groundwater Sampling Schedule
MW-AR; MW-B; MW-C; MW-D; MW-E; MW-F; MW-GR	Quarterly

#### 3.1 Groundwater Sampling Methodology

On June 8, 2022, static fluid levels were gauged with an oil-water interface probe to the nearest hundredth of a foot for all groundwater monitoring wells. Groundwater samples were not collected at any Site wells due to having an insufficient amount of groundwater. Map of BTEX Concentrations for June 2022 is shown on Figure 4. Historical hydrocarbon impacts to groundwater over the past decade for all groundwater monitoring wells can be seen in previous quarterly reports (tables, figures, etc.) submitted to the NMOCD.

#### 4. Elevation and Gradient of the Potentiometric Surface

During the 2Q2022 GWSE, GHD conducted gauging events prior to the groundwater sample collection on June 8, 2022. All fluid level measurements were from tops of casings which were professionally surveyed. Due to the lack of three elevation points, there was insufficient elevation data to determine the average elevation change and gradient of the potentiometric surface during June 2022. Historical elevation data, which can be seen in previous quarterly reports submitted to the NMOCD, indicates groundwater flow is generally toward the southeast. Quarterly Gauging and Elevation of the Potentiometric Surface Data 2Q2022 are provided in Table 1. Map of the Potentiometric Surface for June 2022 is provided as Figure 3.

## 5. Summary of Findings

Base on the GWSE performed at the Site during the 2Q2022, the following summary of findings is presented:

- No wells had sufficient groundwater for sampling in 2Q2022.
- Monitor wells MW-AR, MW-B, MW-D, MW-E, and MW-GR are dry wells as of June 2022. Historical hydrocarbon impacts to groundwater over the past decade for these groundwater monitoring wells can be seen in previous quarterly reports submitted to the NMOCD.
- There is insufficient data to determine the gradient of the potentiometric surface during June 2022. Historical data indicates groundwater flow is generally southeast.
- Measurable LNAPL was not present in any wells due to a decreasing water table. Historical LNAPL thicknesses for all groundwater monitoring wells can be seen in previous quarterly reports submitted to the NMOCD.

### 6. Recommendations

Based upon the data and findings presented in this Report, the following are recommended for the third quarter of 2022:

- Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8260B for all monitor wells located on-Site.
- Replacement wells are scheduled to be installed during the summer of 2022 to delineate the nature and extent of hydrocarbon impacted groundwater.

Table 1

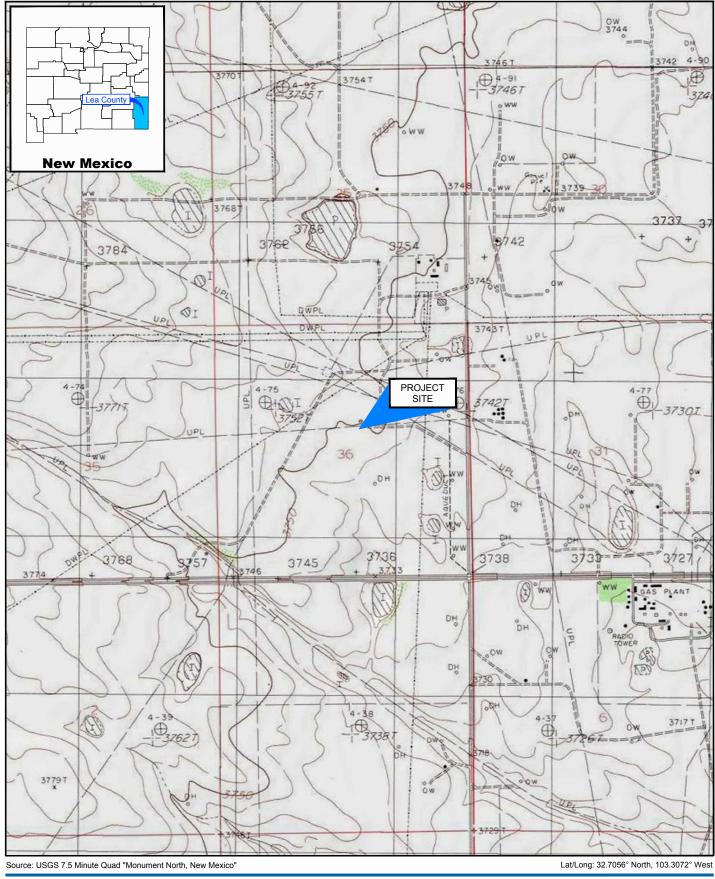
## Quarterly Gauging and Elevation of the Potentiometric Surface Data 2Q 2022 DCP Midstream, LP

#### Hobbs Gas Plant, NMOCD AP-122, EMNRD Incident Number NPAC0706832026 Lea County, New Mexico

Well ID	Elevation of Top of Casing (famsl)	Date	Depth to Water (fbtoc)	Depth to LNAPL (fbtoc)	LNAPL Thickness (ft)	Elevation of Potentiometric Surface (famsl)	Measured Total Depth (fbtoc)	Volume LNAPL Recovered (gal)	Volume Groundwater Bailed (gal)	Volume Groundwater Removed Via EFR (gal)
MW-AR	3755.73	06/08/22	-	-	-	Dry	69.28	-	-	-
MW-B	3755.70	06/08/22	-	-	-	Dry	70.98	-	-	-
MW-C	3755.35	06/08/22	75.01	1	0.00	3680.34	75.26	-	-	-
MW-D	3755.19	06/08/22	-	•	-	Dry	69.86	-	-	-
MW-E	3754.11	06/08/22	-	•	-	Dry	71.39	-	-	-
MW-F	3755.88	06/08/22	75.15	-	0.00	3680.73	75.37	-	-	-
MW-GR	3754.70	06/08/22	-	-	-	Dry	72.49	-	-	-

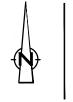
#### Notes:

- 1. famsl = feet above mean sea level
- 2. fbtoc = feet below top of casing
- 3. ft = feet
- 4. gal = gallons
- 5. If measurable LNAPL was present, elevation of the potentiometric surface was calculated using 0.81 as specific gravity of LNAPL.
- 6. MW-GR was installed in March 2018 to replace MW-G and surveyed on June 20, 2018.
- 7. Wells were re-surveyed on September 2013.



0 1000 2000ft

Coordinate System:
NAD 1983 (2011) StatePlaneNew Mexico East (US Feet)



GHD

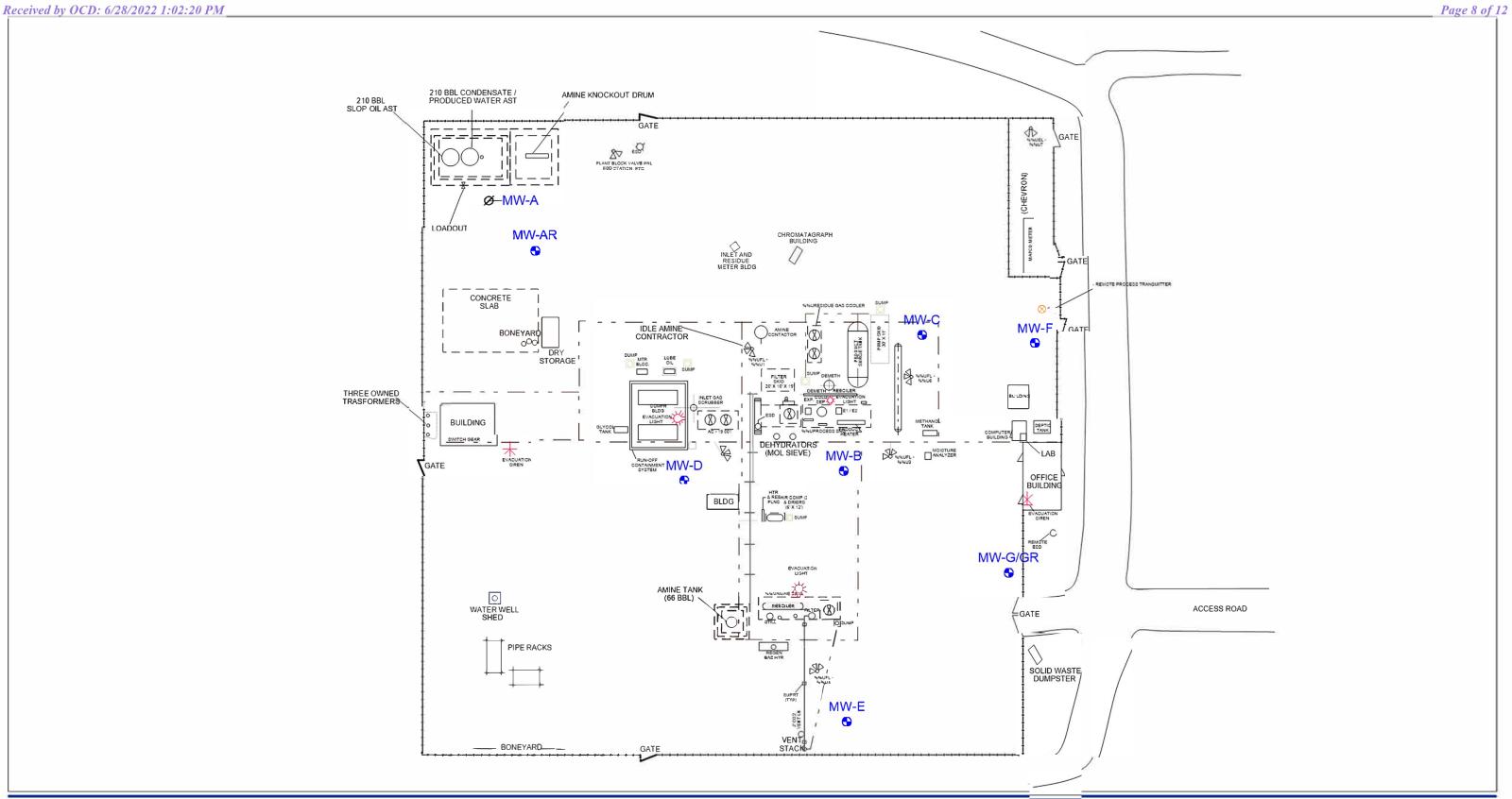
DCP MIDSTREAM, LP HOBBS GAS PLANT, AP-122 INCIDENT NPAC0706832026

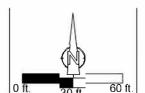
SITE LOCATION MAP

11209459-02

Dec 19, 2018

FIGURE 1







Monitor Well LocationLocation of Destroyed Monitor Well Fence Line

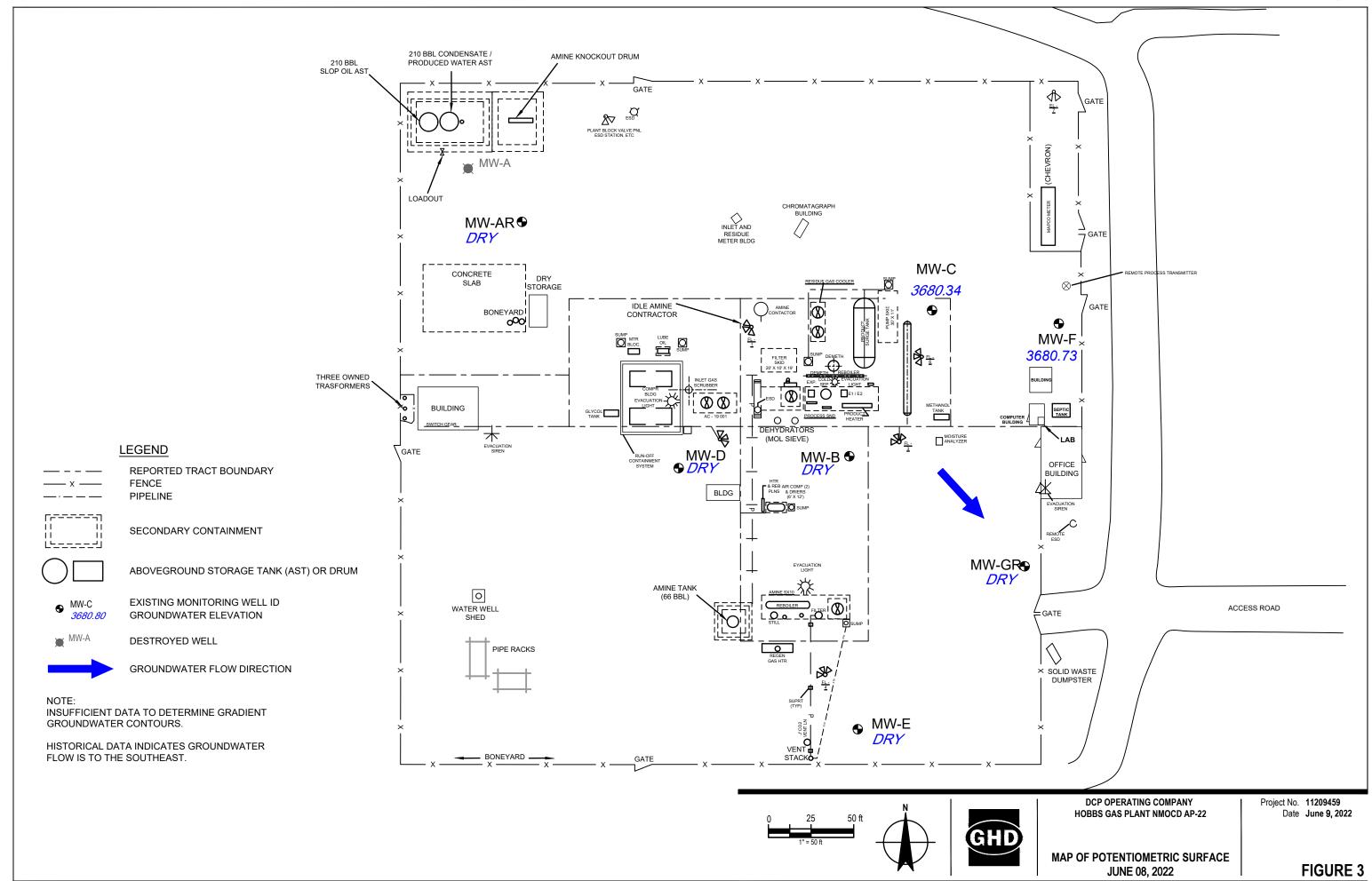
DCP OPERATING COMPANY HOBBS GAS PLANT, NMOCD AP-122 INCIDENT NPAC0706832026

SITE DETAILS MAP

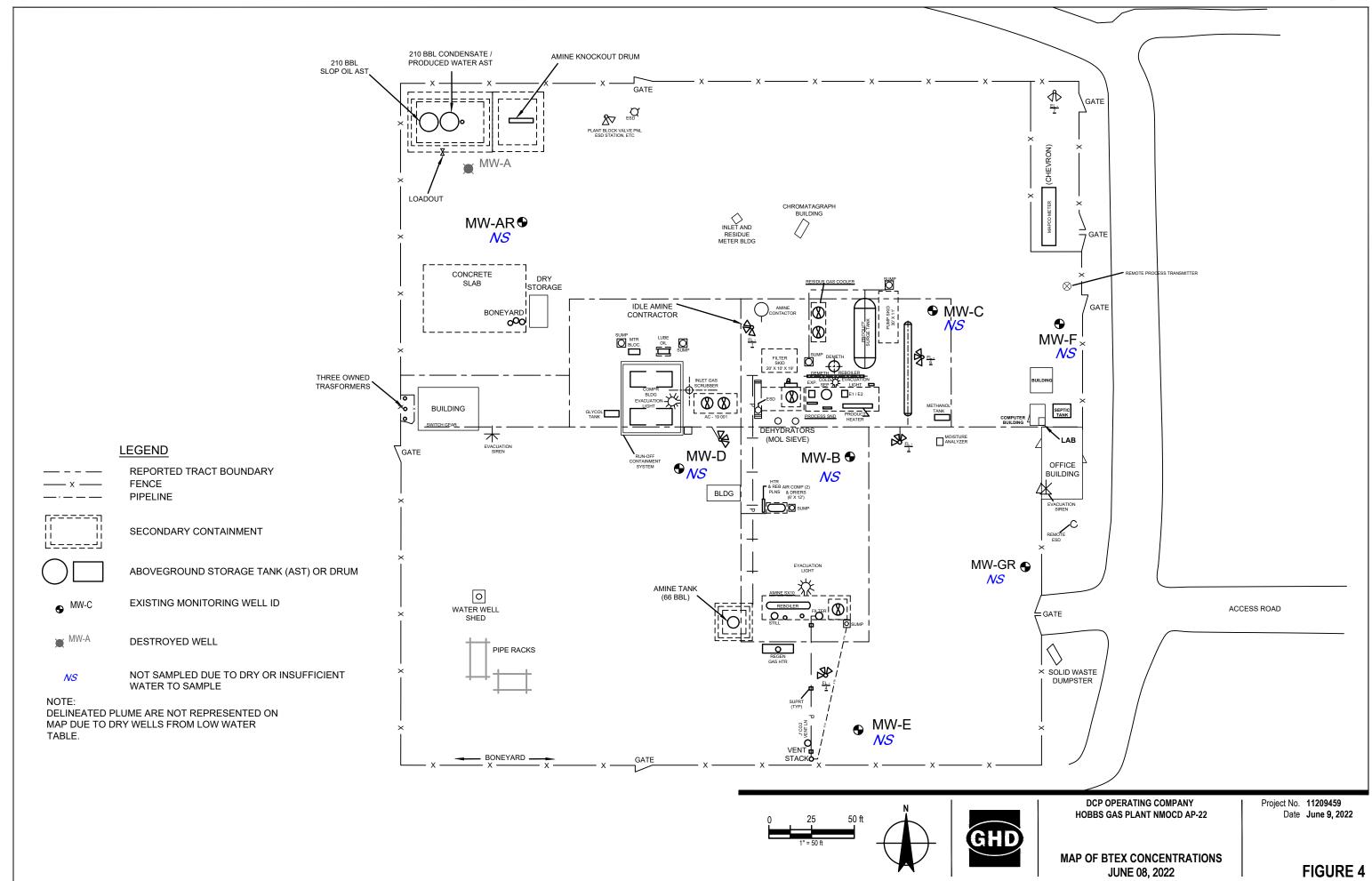
PROJECT 11209459 APRIL 7, 2021

FIGURE 2

Received by OCD: 6/28/2022 1:02:20 PM



Received by OCD: 6/28/2022 1:02:20 PM





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CONDITIONS

Action 121157

#### **CONDITIONS**

Operator:	OGRID:			
DCP OPERATING COMPANY, LP	36785			
6900 E. Layton Ave	Action Number:			
Denver, CO 80237	121157			
	Action Type:			
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)			

#### CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2Q 2022 Groundwater Monitoring Summary Report: Content satisfactory 1. Continue NMOCD-approved quarterly GWSEs for BTEX by Method 8260B for all monitor wells located on-Site 2. Replacement wells are scheduled to be installed during the summer of 2022 to delineate the nature and extent of hydrocarbon impacted groundwater 3. Submit third and fourth quarter reports no later than March 31, 2023.	1/4/2023