1755 Wittington Place, Suite 500
Dallas, Texas 75234
United States
ghd.com

REVIEWED
By Mike Buchanan at 4:16 pm, Dec 23, 2024

Your Ref.: Incident Number nAUTOFAB000027
Our Ref.: 12621861-NMOCD-2

December 10, 2024

Review of the 2024 Annual Groundwater Monitoring Report for Artesia Tank Farm: Content Satisfactory
1. Continue to conduct groundwater samples as approved and prescribed by OCD.
2. Under recommendations, assessment and remediation has been recommended. Please propose a work plan with details to OCD within sixty (60) days from receipt of this approval.
3. Continue to monitor the site, and keep OCD apprised of the incident details by submitting the 2024 annual report by December 10, 2025.

State of New Mexico
Energy, Minerals, and Natural Resources Department
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

2024 Annual Groundwater Monitoring Report
Artesia Tank Farm
Centurion Pipeline, LP
Eddy County, New Mexico
New Mexico Oil Conservation Division Permit 2RP-6-0
Incident Number nAUTOFAB000027

To whom it may concern:

On behalf of Centurion Pipeline, LP (Centurion), GHD Services the *2024 Annual Groundwater Monitoring Report* (Report) for the above-referenc New Mexico Oil Conservation Division (NMOCD). The Report summarizes activ e during 2024.

Should you have any questions or comments regarding this submittal, please contact the undersigned.

Regards,

GHD

Deedee Whittington
Project Manager

+1 972 331-8551
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Morgan Mitch McCall
Project Director

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mitch.mccall@ghd.com

BO/jlf/1

Encl.: 2024 Annual Groundwater Monitoring Report

Copy to: Stacy Boultinghouse, Energy Transfer
New Mexico State Land Office

2024 Annual Groundwater Monitoring Report

Artesia Tank Farm
Eddy County, New Mexico
NMOCD 2RP-6-0
Incident Number nAUTOFAB000027

Centurion Pipeline, LP

December 10, 2024

→ The Power of Commitment

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1. Introduction

This report presents the results of groundwater monitoring activities performed during 2024 by GHD Services Inc. (GHD) at the Centurion Pipeline, LP (Centurion), Artesia Tank Farm (Site). The Site is located 12 miles southeast of Artesia, New Mexico in Section 10, Township 18 South, and Range 27 East. Geographic coordinates for the Site are 32.761507° North and 104.270481° West (**Figure 1**). The Site is regulated by the New Mexico Oil Conservation Division (NMOCD) under remediation permit number 2RP-6 and associated with incident number nAUTOFAB000027.

1.1 Site Description Background

The Site consists of an active crude oil storage tank facility and associated subgrade pipelines. The Site has been in active assessment and remediation since 1993 when a release was discovered at the Site. A total of twenty-three soil borings and nineteen monitoring wells have been installed at the Site between 1993 and 2016. Seventeen of the nineteen monitoring wells have been plugged. **Figure 2** shows the well locations and other Site features.

In March 1993, a crude oil release was discovered at the Artesia Tank Farm. In August 1993, initial assessment activities, which included the advancement of twenty-three soil borings at the Site, identified impacts from light non-aqueous phase liquid (LNAPL) extended approximately 1,700 feet off-Site, along Scoggin Draw. An interceptor trench and associated groundwater separation/air-stripper remediation system were installed in November 1994 to control and remediate the LNAPL and dissolved-phase hydrocarbon plume. Seventeen monitoring wells (MW-1 through MW-14, MW-2A, MW-3A, and MW-3B) were subsequently installed along Scoggin Draw to evaluate and delineate the extent of the groundwater impact. Quarterly groundwater monitoring and reporting were performed until 1997, when the remediation system was shut down. The remediation system was subsequently dismantled in the fall of 1998. Between June 2003 and November 2013, all seventeen monitoring wells were plugged and abandoned following NMOCD approval. Historic well locations and remediation systems are depicted on **Figure 3.**

According to a status report submitted to the NMOCD on April 4, 2012, analytical data demonstrated general trends associated with biodegradation of residual petroleum hydrocarbons and the dissolved-phase contaminant plume appeared to be non-mobile and decreasing. Additionally, chemicals of concern (COC) concentrations in groundwater underlying areas outside of the tank farm were below applicable New Mexico Water Quality Control Commission (NMWQCC) standards. Based on this and the facilities active status, additional remediation at the Site has been deferred until the Site is more accessible for removal of LNAPL.

In October 2016, two monitoring wells (MW-1 and MW-2) were installed downgradient of the Site to monitor and confirm COC concentrations in groundwater off-Site remain below applicable NMWQCC standards. Annual groundwater monitoring events have occurred at the Site since 2016.

An annual groundwater monitoring event was conducted in September 2024 and is discussed in this report.

1.2 Geology and Hydrology

The lithology encountered during previous investigation activities at the Site consisted primarily of evaporates with intermittent layers of fine-grained sand. The surface contained intermittent caliche nodules. The United States Agricultural Department soil survey indicates that the Site is in the Artesia Group which consists of fine grain sandstones, evaporates, and dolostone.

2. Groundwater Monitoring

GHD performed an annual groundwater monitoring event on September 25, 2024. The monitoring program included gauging and collecting groundwater samples from the two monitoring wells MW-1 and MW-2.

2.1 Monitoring Well Gauging

GHD personnel measured the depth to groundwater and LNAPL thickness, if present, in the wells indicated above using an electronic oil/water interface probe (IP). LNAPL was not detected in either monitoring well in 2024. The IP was cleaned with laboratory grade soap and purified water prior to gauging each monitoring well. Groundwater measurement data is summarized in **Table 1**.

As the two monitoring wells are not surveyed, groundwater gradient was not calculated using the data generated during the monitoring event. Review of historical data indicates the groundwater gradient at the Site is generally to the west/southwest.

2.2 Groundwater Sampling

Following gauging, GHD personnel utilized dedicated polyethylene bailers to purge a minimum of three well volumes of groundwater or until the well was dry. The wells were given time to recover prior to collecting a groundwater sample. After purging, groundwater quality parameters of temperature, pH, oxidation reduction potential, and conductivity were collected with a multi-parameter groundwater quality meter to confirm stabilization of the groundwater prior to the collection of groundwater samples.

Following purging and confirmation of groundwater stabilization, groundwater samples were collected from the bailers, placed into labeled, laboratory-provided sample containers, immediately placed on ice in coolers, and transported under chain-of-custody documentation to ALS Life Sciences Division, Environmental Laboratory in Houston, Texas. All samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) via the United States Environmental Protection Agency (USEPA) SW-846 Method 8260B.

2.3 Quality Assurance/Quality Control

During the groundwater monitoring event, a field duplicate was collected as a Quality Assurance/Quality Control (QA/QC) sample and subsequently submitted for laboratory analysis. A trip blank was also submitted as a QA/QC sample for the groundwater monitoring event.

2.4 Analytical Results

The NMWQCC mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater quality standards have been set for the protection of human health, domestic water supply, and irrigation use.

The groundwater analytical results for 2024 are summarized in **Table 2**, and the corresponding laboratory analytical reports are included in Appendix A. A COC concentration map is presented as **Figure 4**. A summary of analytical results for 2024 is provided below.

– BTEX was not detected at concentrations above laboratory detection limits in the groundwater samples collected from monitoring wells MW-1 and MW-2 during 2024.

3. Summary and Recommendations

3.1 Summary

The following summarizes the information and data presented in this report:

– LNAPL was not detected in either monitoring well in 2024.
– Concentrations of BTEX were not detected above laboratory detection limits in either monitoring well during 2024.

3.2 Recommendations

Based on results from the 2024 groundwater monitoring event, GHD recommends the following:

– Continue annual groundwater monitoring until Site is more accessible for additional assessment and remediation efforts.

4. Scope and Limitations

This report has been prepared by GHD for Centurion Pipeline, LP and may only be used and relied on by Centurion Pipeline, LP for the purpose agreed between GHD and Centurion Pipeline, LP.

GHD otherwise disclaims responsibility to any person other than Centurion Pipeline, LP arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

Table 1

Summary of Groundwater Measurement Data
Artesia Tank Farm
Eddy County, New Mexico
Centurion Pipeline, LP
NMOCD 2RP 6-0

Well ID	Measurement Date	Depth to Bottom of Screen Interval (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet AMSL)
MW-1	11/30/2016	60.00	28.99	NS
	7/12/2017	62.88	30.84	NS
	7/10/2018	--	--	NS
	9/27/2019	--	36.52	NS
	8/13/2020	62.60	33.67	NS
	9/24/2021	62.60	32.95	NS
	8/10/2022	62.60	35.88	NS
	9/28/2023	62.82	36.61	NS
	9/25/2024	63.38	39.94	NS
MW-2	11/30/2016	60.00	28.99	NS
	7/12/2017	62.38	30.84	NS
	7/10/2018	--	--	NS
	9/27/2019	--	36.52	NS
	8/13/2020	62.30	33.67	NS
	9/24/2021	62.30	32.95	NS
	8/10/2022	62.30	35.88	NS
	9/28/2023	62.38	35.84	NS
	9/25/2024	62.56	37.91	NS

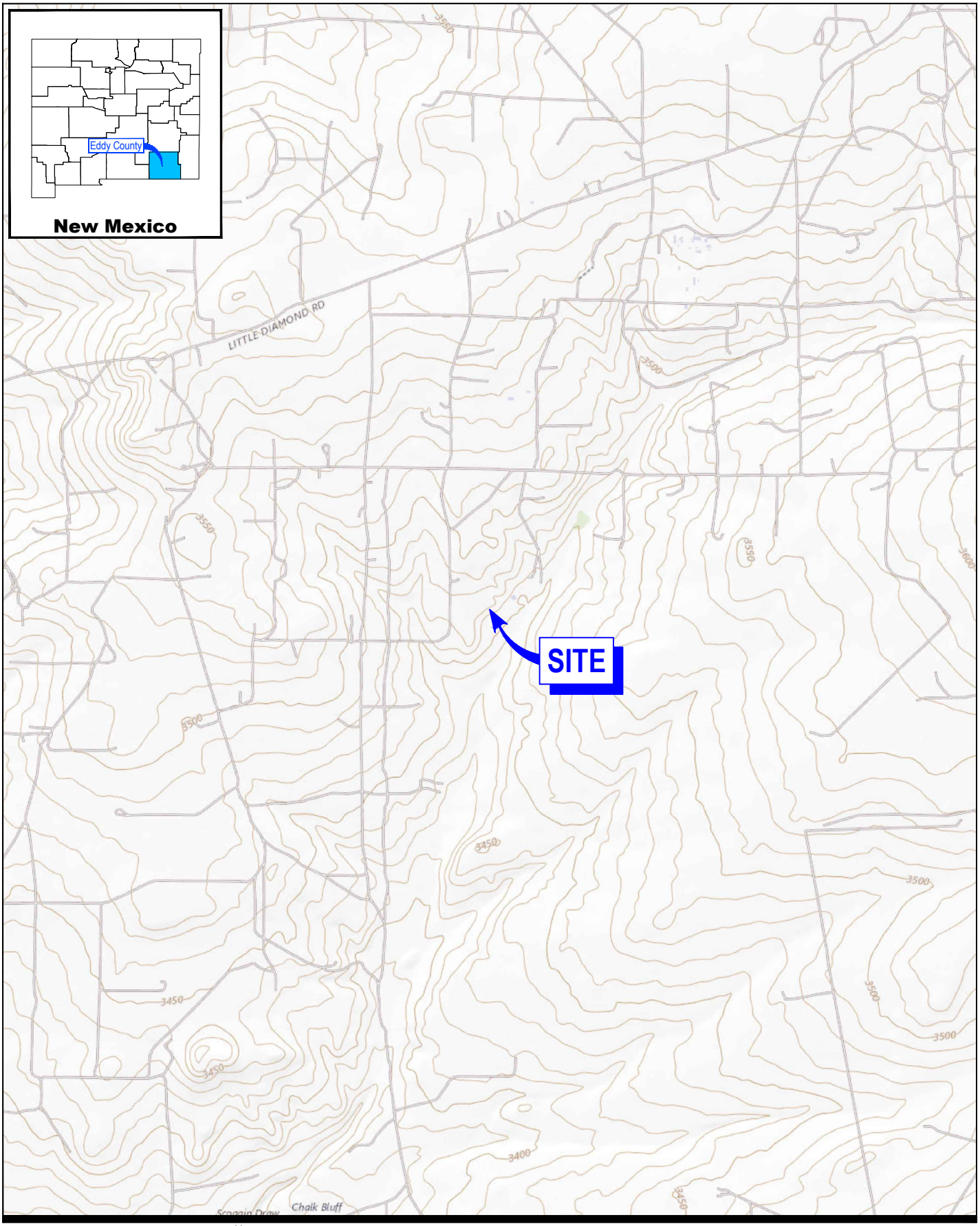
Notes:
1. feet AMSL = feet above mean sea level.
2. NS = Not surveyed.

Table 2

Summary of Groundwater Analytical Results
Artesia Tank Farm
Eddy County, New Mexico
Centurion Pipeline, LP
NMOCD 2RP 6-0

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards:		**0.01**	**0.75**	**0.75**	**0.62**
MW-1	11/30/2016	0.0006	<0.00050	<0.00050	<0.00050
	7/12/2017	<0.00060	<0.00050	<0.00050	<0.00050
	7/10/2018	<0.000408	<0.000367	<0.000657	<0.00063
	9/27/2019	<0.000408	<0.000367	<0.000657	<0.00063
	8/13/2020	0.00047 J	0.00171 J	<0.000657	<0.00063
	9/24/2021	0.000756 J	0.00145 J	<0.000657	0.000678 J
	8/10/2022	<0.000408	<0.000367	<0.000657	<0.000642
	9/28/2023	<0.0010	<0.0010	<0.0010	<0.0030
	9/25/2024	<0.0010	<0.0010	<0.0010	<0.0030
MW-2	11/30/2016	0.0023 J	<0.00050	<0.00050	0.0035 J
	7/12/2017	<0.00060	<0.00050	<0.00050	<0.00050
	7/10/2018	<0.000408	<0.000367	<0.000657	<0.000630
	9/27/2019	<0.000408	<0.000367	<0.000657	<0.000630
	8/13/2020	0.00141 J	0.00175 J	<0.000657	0.00073 J
	9/24/2021	<0.00408	<0.00367	<0.000657	<0.000642
	8/10/2022	0.000685 J	0.000645 J	<0.000657	<0.000642
	9/28/2023	<0.0010	<0.0010	<0.0010	<0.0030
	9/25/2024	<0.0010	<0.0010	<0.0010	<0.0030

Notes:
1. Analytical results are presented in milligrams per liter (mg/L).
2. NMWQCC = New Mexico Water Quality Control Commission.
3. Shaded/bolded results exceed their respective NMWQCC groundwater quality standard.



0 1000 2000 ft

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

N

GHD

CENTURION PIPELINE, LP
EDDY COUNTY, NEW MEXICO
ARTESIA TANK FARM
NMOCD 2RP-6

Project No. **12621861**
Date **October 2024**

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12621861\Digital_Design\ACAD\Figures\RPT002\12621861-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 18 October 2024 5:50 PM

Data Source: USGS 7.5 Minute quad "Spring Lake, Lake McMillan North, Red Lake, and Illinois Camp, NM"
Lat/Long: 32.761507° North, 104.270481° West

0 100 200 ft

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

N

GHD

CENTURION PIPELINE, LP
EDDY COUNTY, NEW MEXICO
ARTESIA TANK FARM
NMOCD 2RP-6

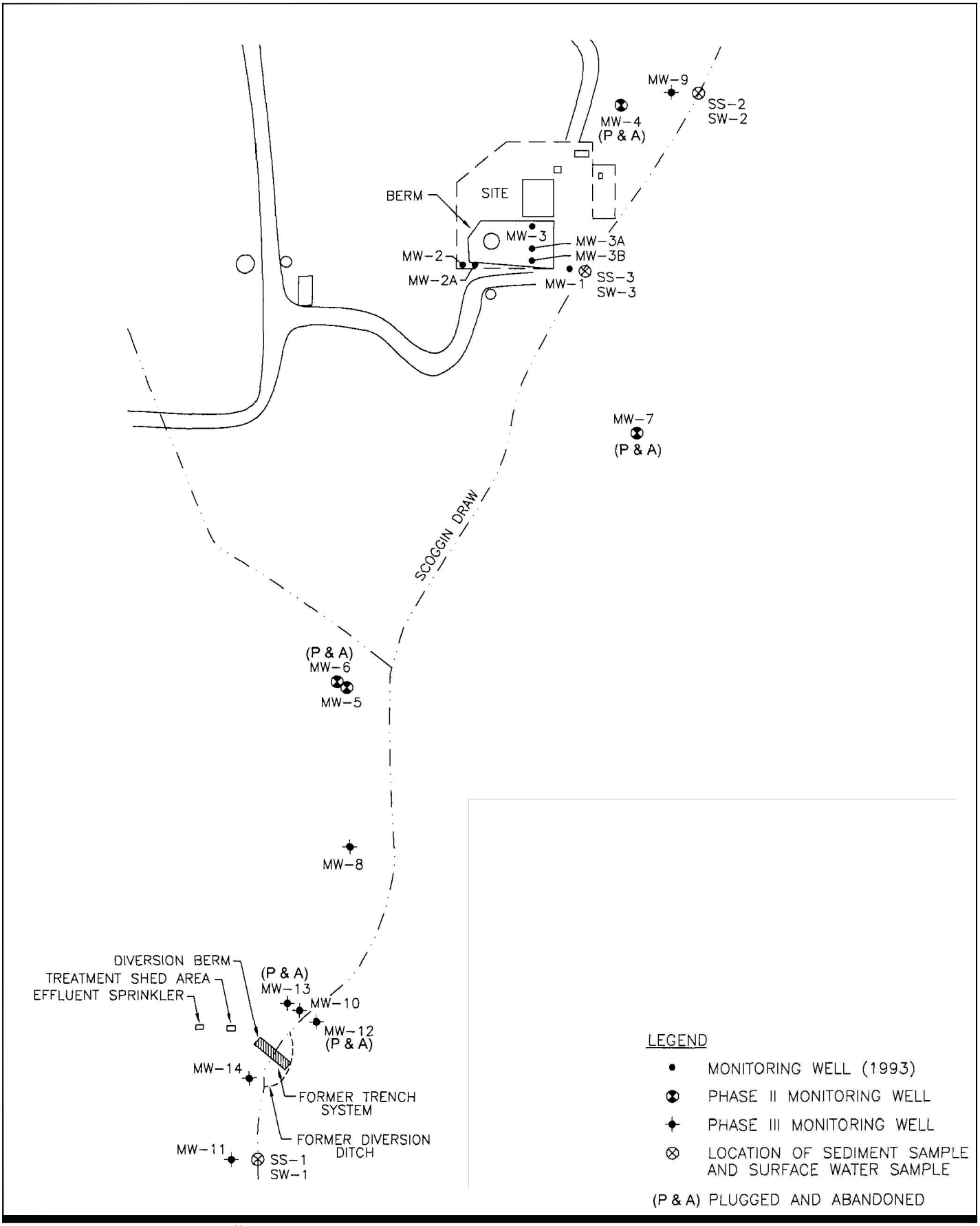
Project No. **12621861**
Date **October 2024**

SITE DETAILS MAP

FIGURE 2

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12621861\Digital_Design\ACAD\Figures\RPT002\12621861-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 18 October 2024 5:50 PM

Data Source: Microsoft Product Screen shot(s) Reprinted with permission from Microsoft Corporation
Lat/Long: 32.761507° North, 104.270481° West



ET GATHERING & PROCESSING, LLC
EDDY COUNTY, NEW MEXICO
ARTESIA TANK FARM
NMOCD 2RP-6-0

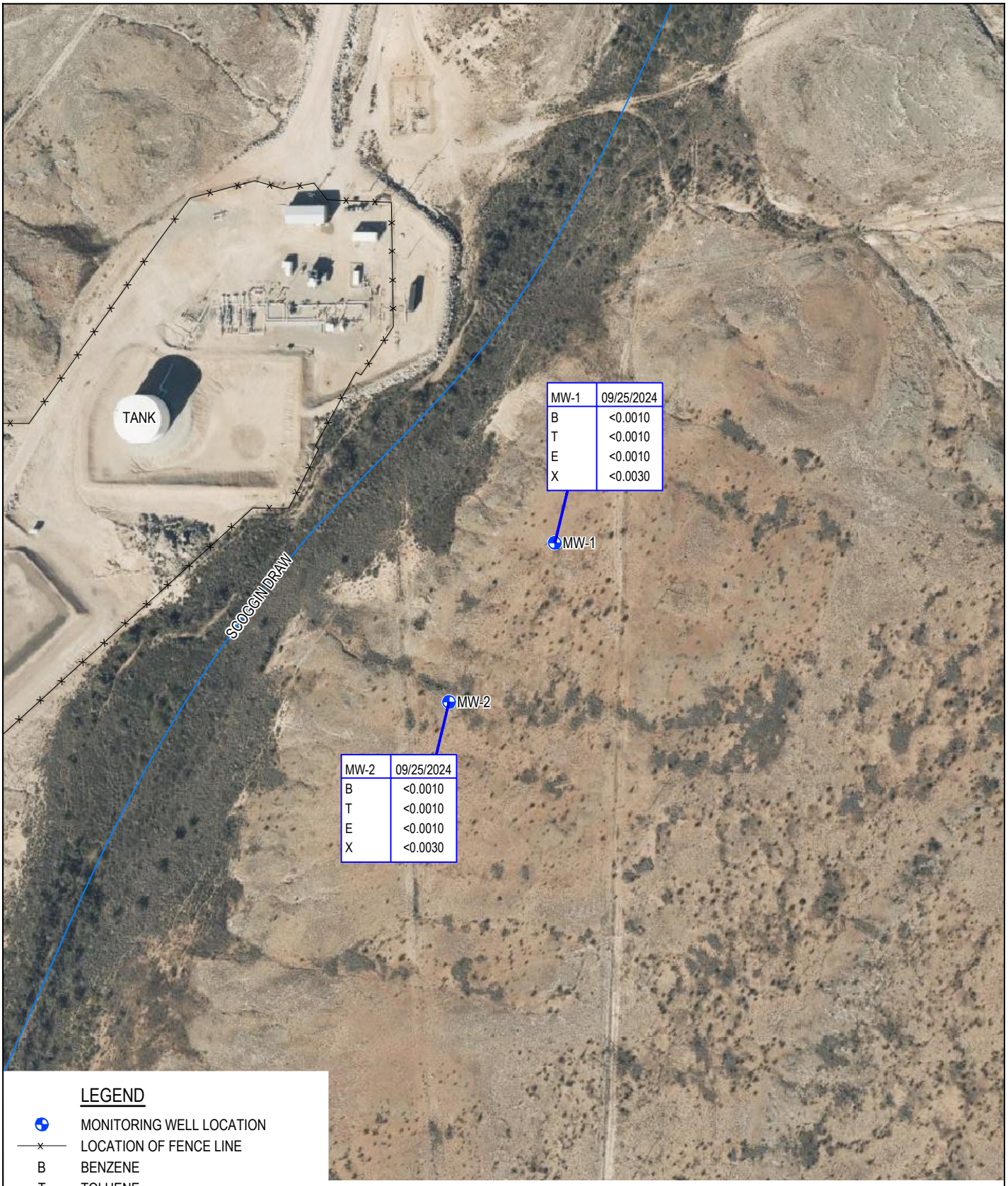
Project No. **12621861**
Date **October 2024**

HISTORIC SITE DETAILS MAP

FIGURE 3

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12621861\Digital_Design\ACAD\Figures\RPT002\12621861-GHD-00-00-RPT-EN-D102_DL-002.dwg
Plot Date: 18 October 2024 5:49 PM

Data Source: Delta Environmental Consultants, Inc.; Figure 2 "Site Map"
File Name: Artesia-2004; Project Number: F002-007



LEGEND

- MONITORING WELL LOCATION
- LOCATION OF FENCE LINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X XYLENES

NOTE:

1. GROUNDWATER CONCENTRATION PRESENTED IN MILLIGRAMS PER LITER (mg/L).

0 100 200 ft

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

N

GHD

CENTURION PIPELINE, LP
EDDY COUNTY, NEW MEXICO
ARTESIA TANK FARM
NMOCD 2RP-6

COC CONCENTRATIONS IN GROUNDWATER (2024)

Project No. **12621861**
Date **October 2024**

FIGURE 4

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12621861\Digital_Design\ACAD\Figures\RPT002\12621861-GHD-00-00-RPT-EN-D101_DL-002.dwg
Plot Date: 18 October 2024 5:48 PM

Data Source: Microsoft Product Screen shot(s) Reprinted with permission from Microsoft Corporation
Lat/Long: 32.761507° North, 104.270481° West

Appendices

Appendix A

2024 Laboratory Analytical Report

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

October 02, 2024

Deedee Whittington
GHDHouston
11451 Katy Freeway
Suite 400
Houston, TX 77079

Work Order: **HS24091421**

Laboratory Results for: **12621861 - ET Artesia Tank Farm**

Dear Deedee Whittington ,

ALS Environmental received 4 sample(s) on Sep 26, 2024 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Alexis Dorenbosch

Generated By: DAYNA.FISHER
Alexis Dorenbosch

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
Work Order: HS24091421

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24091421-01	MW-1-20240925	Groundwater		25-Sep-2024 10:20	26-Sep-2024 09:20	☐
HS24091421-02	MW-2-20240925	Groundwater		25-Sep-2024 11:00	26-Sep-2024 09:20	☐
HS24091421-03	DUP-01	Groundwater		25-Sep-2024 00:00	26-Sep-2024 09:20	☐
HS24091421-04	TRIP BLANK	Water		25-Sep-2024 00:00	26-Sep-2024 09:20	☐

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston **CASE NARRATIVE**
Project: 12621861 - ET Artesia Tank Farm
Work Order: HS24091421

GCMS Volatiles by Method SW8260

Batch ID: R478736

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R478517

Sample ID: VLCSW-240927

- Insufficient sample received to perform MS/MSD. An LCS/LCSD was performed as batch quality control.

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
Sample ID: MW-1-20240925
Collection Date: 25-Sep-2024 10:20

ANALYTICAL REPORT
WorkOrder:HS24091421
Lab ID:HS24091421-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C	**Method:SW8260**					Analyst: TS
Benzene	< 0.0010		0.0010	mg/L	1	28-Sep-2024 01:15
Ethylbenzene	< 0.0010		0.0010	mg/L	1	28-Sep-2024 01:15
Toluene	< 0.0010		0.0010	mg/L	1	28-Sep-2024 01:15
Xylenes, Total	< 0.0030		0.0030	mg/L	1	28-Sep-2024 01:15
Surr: 1,2-Dichloroethane-d4	*103*		*70-126*	*%REC*	*1*	*28-Sep-2024 01:15*
Surr: 4-Bromofluorobenzene	*101*		*77-113*	*%REC*	*1*	*28-Sep-2024 01:15*
Surr: Dibromofluoromethane	*107*		*77-123*	*%REC*	*1*	*28-Sep-2024 01:15*
Surr: Toluene-d8	*97.5*		*82-127*	*%REC*	*1*	*28-Sep-2024 01:15*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
Sample ID: MW-2-20240925
Collection Date: 25-Sep-2024 11:00

ANALYTICAL REPORT
WorkOrder:HS24091421
Lab ID:HS24091421-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C	**Method:SW8260**					Analyst: TS
Benzene	< 0.0010		0.0010	mg/L	1	02-Oct-2024 07:41
Ethylbenzene	< 0.0010		0.0010	mg/L	1	02-Oct-2024 07:41
Toluene	< 0.0010		0.0010	mg/L	1	02-Oct-2024 07:41
Xylenes, Total	< 0.0030		0.0030	mg/L	1	02-Oct-2024 07:41
Surr: 1,2-Dichloroethane-d4	*105*		*70-126*	*%REC*	*1*	*02-Oct-2024 07:41*
Surr: 4-Bromofluorobenzene	*89.3*		*77-113*	*%REC*	*1*	*02-Oct-2024 07:41*
Surr: Dibromofluoromethane	*104*		*77-123*	*%REC*	*1*	*02-Oct-2024 07:41*
Surr: Toluene-d8	*101*		*82-127*	*%REC*	*1*	*02-Oct-2024 07:41*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
Sample ID: DUP-01
Collection Date: 25-Sep-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24091421
Lab ID:HS24091421-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C	**Method:SW8260**					Analyst: TS
Benzene	< 0.0010		0.0010	mg/L	1	27-Sep-2024 23:46
Ethylbenzene	< 0.0010		0.0010	mg/L	1	27-Sep-2024 23:46
Toluene	< 0.0010		0.0010	mg/L	1	27-Sep-2024 23:46
Xylenes, Total	< 0.0030		0.0030	mg/L	1	27-Sep-2024 23:46
Surr: 1,2-Dichloroethane-d4	*103*		*70-126*	*%REC*	*1*	*27-Sep-2024 23:46*
Surr: 4-Bromofluorobenzene	*104*		*77-113*	*%REC*	*1*	*27-Sep-2024 23:46*
Surr: Dibromofluoromethane	*106*		*77-123*	*%REC*	*1*	*27-Sep-2024 23:46*
Surr: Toluene-d8	*98.5*		*82-127*	*%REC*	*1*	*27-Sep-2024 23:46*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
Sample ID: TRIP BLANK
Collection Date: 25-Sep-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24091421
Lab ID:HS24091421-04
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C	**Method:SW8260**					Analyst: TS
Benzene	< 0.0010		0.0010	mg/L	1	28-Sep-2024 00:08
Ethylbenzene	< 0.0010		0.0010	mg/L	1	28-Sep-2024 00:08
Toluene	< 0.0010		0.0010	mg/L	1	28-Sep-2024 00:08
Xylenes, Total	< 0.0030		0.0030	mg/L	1	28-Sep-2024 00:08
Surr: 1,2-Dichloroethane-d4	*101*		*70-126*	*%REC*	*1*	*28-Sep-2024 00:08*
Surr: 4-Bromofluorobenzene	*104*		*77-113*	*%REC*	*1*	*28-Sep-2024 00:08*
Surr: Dibromofluoromethane	*104*		*77-123*	*%REC*	*1*	*28-Sep-2024 00:08*
Surr: Toluene-d8	*97.1*		*82-127*	*%REC*	*1*	*28-Sep-2024 00:08*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
WorkOrder: HS24091421

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R478517 (0)	**Test Name :** LOW LEVEL VOLATILES BY SW8260C				**Matrix:** Water	
HS24091421-04	TRIP BLANK	25 Sep 2024 00:00			28 Sep 2024 00:08	1
Batch ID: R478517 (0)	**Test Name :** LOW LEVEL VOLATILES BY SW8260C				**Matrix:** Groundwater	
HS24091421-01	MW-1-20240925	25 Sep 2024 10:20			28 Sep 2024 01:15	1
HS24091421-03	DUP-01	25 Sep 2024 00:00			27 Sep 2024 23:46	1
Batch ID: R478736 (0)	**Test Name :** LOW LEVEL VOLATILES BY SW8260C				**Matrix:** Groundwater	
HS24091421-02	MW-2-20240925	25 Sep 2024 11:00			02 Oct 2024 07:41	1

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
WorkOrder: HS24091421

QC BATCH REPORT

Batch ID: R478517 (0) **Instrument: VOA6** **Method: LOW LEVEL VOLATILES BY SW8260C**

MBLK Sample ID: **VBLKW-240927** Units: **ug/L** Analysis Date: **27-Sep-2024 22:39**
Client ID: Run ID: **VOA6_478517** SeqNo: **8280576** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	< 1.0	1.0								
Ethylbenzene	< 1.0	1.0								
Toluene	< 1.0	1.0								
Xylenes, Total	< 3.0	3.0								
Surr: 1,2-Dichloroethane-d4	*50.49*	*1.0*	*50*	*0*	*101*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*52.76*	*1.0*	*50*	*0*	*106*	*77 - 113*				
Surr: Dibromofluoromethane	*51.85*	*1.0*	*50*	*0*	*104*	*73 - 126*				
Surr: Toluene-d8	*49.26*	*1.0*	*50*	*0*	*98.5*	*81 - 120*				

LCS Sample ID: **VLCSW-240927** Units: **ug/L** Analysis Date: **27-Sep-2024 21:32**
Client ID: Run ID: **VOA6_478517** SeqNo: **8280574** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.93	1.0	20	0	105	74 - 120				
Ethylbenzene	21.32	1.0	20	0	107	77 - 117				
Toluene	21.9	1.0	20	0	109	77 - 118				
Xylenes, Total	65.3	3.0	60	0	109	75 - 122				
Surr: 1,2-Dichloroethane-d4	*48.84*	*1.0*	*50*	*0*	*97.7*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*49.29*	*1.0*	*50*	*0*	*98.6*	*77 - 113*				
Surr: Dibromofluoromethane	*50.16*	*1.0*	*50*	*0*	*100*	*73 - 126*				
Surr: Toluene-d8	*49.86*	*1.0*	*50*	*0*	*99.7*	*81 - 120*				

LCSD Sample ID: **VLCSDW-240927** Units: **ug/L** Analysis Date: **27-Sep-2024 21:54**
Client ID: Run ID: **VOA6_478517** SeqNo: **8280575** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.64	1.0	20	0	103	74 - 120	20.93	1.39	20	
Ethylbenzene	20.58	1.0	20	0	103	77 - 117	21.32	3.55	20	
Toluene	20.87	1.0	20	0	104	77 - 118	21.9	4.78	20	
Xylenes, Total	61.23	3.0	60	0	102	75 - 122	65.3	6.43	20	
Surr: 1,2-Dichloroethane-d4	*46.92*	*1.0*	*50*	*0*	*93.8*	*70 - 123*	*48.84*	*4.01*	*20*	
Surr: 4-Bromofluorobenzene	*50.46*	*1.0*	*50*	*0*	*101*	*77 - 113*	*49.29*	*2.35*	*20*	
Surr: Dibromofluoromethane	*48.99*	*1.0*	*50*	*0*	*98.0*	*73 - 126*	*50.16*	*2.36*	*20*	
Surr: Toluene-d8	*48.51*	*1.0*	*50*	*0*	*97.0*	*81 - 120*	*49.86*	*2.73*	*20*	

ALS Houston, US Date: 02-Oct-24

Client:	GHDHouston
Project:	12621861 - ET Artesia Tank Farm
WorkOrder:	HS24091421

QC BATCH REPORT

Batch ID:	**R478517 (0)**	**Instrument:**	**VOA6**	**Method:**	**LOW LEVEL VOLATILES BY SW8260C**

The following samples were analyzed in this batch:	HS24091421-01	HS24091421-03	HS24091421-04

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
WorkOrder: HS24091421

QC BATCH REPORT

Batch ID: R478736 (0) **Instrument: VOA9** **Method: LOW LEVEL VOLATILES BY SW8260C**

MBLK Sample ID: **VBLKW-241001** Units: **ug/L** Analysis Date: **02-Oct-2024 03:14**
Client ID: Run ID: **VOA9_478736** SeqNo: **8285475** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	< 1.0	1.0								
Ethylbenzene	< 1.0	1.0								
Toluene	< 1.0	1.0								
Xylenes, Total	< 3.0	3.0								
Surr: 1,2-Dichloroethane-d4	*51.69*	*1.0*	*50*	*0*	*103*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*44.25*	*1.0*	*50*	*0*	*88.5*	*77 - 113*				
Surr: Dibromofluoromethane	*52.21*	*1.0*	*50*	*0*	*104*	*73 - 126*				
Surr: Toluene-d8	*51.17*	*1.0*	*50*	*0*	*102*	*81 - 120*				

LCS Sample ID: **VLCSW-241001** Units: **ug/L** Analysis Date: **02-Oct-2024 02:09**
Client ID: Run ID: **VOA9_478736** SeqNo: **8285473** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.42	1.0	20	0	92.1	74 - 120				
Ethylbenzene	18.99	1.0	20	0	95.0	77 - 117				
Toluene	19.57	1.0	20	0	97.9	77 - 118				
Xylenes, Total	56.06	3.0	60	0	93.4	75 - 122				
Surr: 1,2-Dichloroethane-d4	*50.09*	*1.0*	*50*	*0*	*100*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*49.64*	*1.0*	*50*	*0*	*99.3*	*77 - 113*				
Surr: Dibromofluoromethane	*50.97*	*1.0*	*50*	*0*	*102*	*73 - 126*				
Surr: Toluene-d8	*52.68*	*1.0*	*50*	*0*	*105*	*81 - 120*				

LCSD Sample ID: **VLCSDW-241001** Units: **ug/L** Analysis Date: **02-Oct-2024 02:31**
Client ID: Run ID: **VOA9_478736** SeqNo: **8285474** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.61	1.0	20	0	88.0	74 - 120	18.42	4.52	20	
Ethylbenzene	17.59	1.0	20	0	87.9	77 - 117	18.99	7.7	20	
Toluene	17.86	1.0	20	0	89.3	77 - 118	19.57	9.13	20	
Xylenes, Total	52.44	3.0	60	0	87.4	75 - 122	56.06	6.68	20	
Surr: 1,2-Dichloroethane-d4	*49.34*	*1.0*	*50*	*0*	*98.7*	*70 - 123*	*50.09*	*1.5*	*20*	
Surr: 4-Bromofluorobenzene	*49.13*	*1.0*	*50*	*0*	*98.3*	*77 - 113*	*49.64*	*1.02*	*20*	
Surr: Dibromofluoromethane	*52*	*1.0*	*50*	*0*	*104*	*73 - 126*	*50.97*	*2*	*20*	
Surr: Toluene-d8	*52.07*	*1.0*	*50*	*0*	*104*	*81 - 120*	*52.68*	*1.15*	*20*	

ALS Houston, US Date: 02-Oct-24

Client:	GHDHouston
Project:	12621861 - ET Artesia Tank Farm
WorkOrder:	HS24091421

QC BATCH REPORT

Batch ID: R478736 (0) **Instrument:** VOA9 **Method:** LOW LEVEL VOLATILES BY SW8260C

The following samples were analyzed in this batch: HS24091421-02

ALS Houston, US Date: 02-Oct-24

Client: GHDHouston
Project: 12621861 - ET Artesia Tank Farm
WorkOrder: **HS24091421**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

ALS Houston, US Date: 02-Oct-24

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arizona	AZ0793	27-May-2025
Arkansas	88-00356_2024	27-Mar-2025
California	2919; 2025	30-Apr-2025
Dept of Defense	L24-240	30-Apr-2026
Dept of Defense	L24-239	30-Apr-2026
Florida	E87611-38	30-Jun-2025
Illinois	2000322023-11	31-Jul-2025
Kansas	E-10352 2023-2024	31-Jul-2025
Kentucky	123043	30-Apr-2025
Louisiana	03087 2023-2024	30-Jun-2025
Maine	2024017	23-Jun-2026
Michigan	9971	30-Apr-2025
Nebraska	NE-OS-25-13	30-Apr-2025
New Jersey	TX008	30-Jun-2025
North Carolina	624 - 2024	31-Dec-2024
Pennsylvania	018	30-Jun-2025
Tennessee	04016	30-Apr-2025
Texas	T104704231 TX-C24-00130	30-Apr-2025
Utah	TX026932023-14	31-Jul-2025

ALS Houston, US Date: 02-Oct-24

Sample Receipt Checklist

Work Order ID: HS24091421 **Date/Time Received:** 26-Sep-2024 09:20

Client Name: GHDHouston **Received by:** Ragen Giga

Completed By: /S/ Ruben Estrada-Jr (eSignature) 26-Sep-2024 18:40 (Date/Time) **Reviewed by:** /S/ Alexis Dorenbosch (eSignature) 27-Sep-2024 13:40 (Date/Time)

Matrices: Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:323393
Samplers name present on COC?	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 ☐	

Temperature(s)/Thermometer(s):	1.2C	IR34
Cooler(s)/Kit(s):	52649	
Date/Time sample(s) sent to storage:	9/26/24 18:00	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑

pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Form

Page _____ of _____

COC ID: 323393

24091421

GHDHouston

12621861 - ET Artesia Tank Farm

ALS Project Manager:

Customer Information		Project Information			
Purchase Order	E-23140-CS-22600001 Stacy Boul	Project Name	12621861 - ET Artesia Tank Farm	A	8260_LL_W (8260 BTEX)
Work Order		Project Number	12621861	B	
Company Name	GHD	Bill To Company	ET Gathering & Processing LLC	C	
Send Report To	Deedee Whittington	Invoice Attn	Stacy Boultinghouse	D	
Address	11451 Katy Fwy Suite 400	Address	800 Sonterra Blvd Ste 400	E F	
City/State/Zip	Houston, TX 77079	City/State/Zip	San Antonio TX 78258	G	
Phone	(713) 734-3090	Phone		H	
Fax	(713) 734-3391	Fax		I	
e-Mail Address	deedee.whittington@ghd.com	e-Mail Address	Stacy.Boultinghouse@energytransfer.co	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1-20240925	9/25	10:20	GW	2,8	3	X										
2	MW-2-20240925	9/25	11:00	GW	2,8	3	X										
3																	
4	DUP-01	9/25		GW	2,8	3	X										
5	Trip Blank					2											
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Hunter Johnson

Shipment Method: Fedex

Required Turnaround Time: (Check Box) [X] STD 10 Wk Days [ ] 5 Wk Days [ ] 2 Wk Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by:	Date: 9/25	Time: 12:20	Received by:	Notes: 12621861 - ET Artesia Tank Farm	
Relinquished by:	Date:	Time:	Received by (Laboratory): R Cuga 9/26/24 9:20	Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	52649	1.2c

QC Package: (Check One Box Below)

- [X] Level II Std QC
- [ ] Level III Std QC/Raw Data
- [ ] Level IV SVM46/CLP
- [ ] Other
- [ ] TRRP Checklist
- [ ] TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

IR 34 CF 0.0

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS

ORIGIN ID:SGRA (505) 546-2198
ELIZABETH FAIN
GHD
6121 INDIAN SCHOOL RD. NE
SUITE 200
ALBUQUERQUE, NM 87110
UNITED STATES US

SHIP DATE: 13SEP24
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3808

TO SAMPLE RECEIVING
ALS GROUP USA,CORP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: GHD - B0103277 - LA

RMA:

FedEx Express

FedEx
TRK# 0221 7386 7926 3735

THU - 26 SEP 10:30A
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US IAH

#4795404 09/25 5B3J2/4EF9/9AE3

W EXP 01/25

EXP 08/25

9/26/24

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:
CENTURION PIPELINE L.P. 516 Veterans Airpark Lane Midland, TX 79705	237722
	Action Number: 412011
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2024 Annual Groundwater Monitoring Report for Artesia Tank Farm: Content Satisfactory 1. Continue to conduct groundwater samples as approved and prescribed by OCD. 2. Under recommendations, assessment and remediation has been recommended. Please propose a work plan with details to OCD within sixty (60) days from receipt of this approval. 3. Continue to monitor the site, and keep OCD apprised of the incident details by submitting the 2024 annual report by December 10, 2025.	12/23/2024