



March 11, 2025

New Mexico Oil Conservation Division

New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: 2024 Annual Groundwater Monitoring Report & Closure Request

McCoy Gas Com D #1E
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: NCS2105634419

To Whom it May Concern:

Ensolum, LLC (Ensolum) on behalf of Hilcorp Energy Company (Hilcorp), presents this *2024 Annual Groundwater Monitoring Report & Closure Request* to the New Mexico Oil Conservation Division (NMOCD) to document groundwater monitoring activities conducted at the McCoy Gas Com D #1E natural gas production site (Site) during 2024. The Site is located within Unit Letter E, Section 28, within Township 30 North and Range 12 West, San Juan County, New Mexico (Figure 1). Three monitoring wells onsite are measured quarterly for groundwater elevations, with groundwater from only MW-1R sampled each quarter. This report summarizes the results of the 2024 monitoring events. Based on current and historical data gathered at the Site, Ensolum/Hilcorp is requesting closure of the Site and no further action for NMOCD Incident Number NCS2105634419.

SITE BACKGROUND

Comprehensive Site history, work plans, and reports for the Site are available in the NMOCD database. Hilcorp acquired the Site from XTO Energy, Inc. in December 2017 and continued semi-annual groundwater elevation monitoring for all the wells, along with semi-annual groundwater sampling of MW-1R. In October 2021, the NMOCD approved transitioning to quarterly groundwater elevation monitoring for all wells and quarterly sampling of MW-1R. Summaries of historical and current groundwater elevation data and laboratory analytical results are provided in Table 1 and Table 2, respectively.

SITE GROUNDWATER CLEANUP STANDARDS

The NMOCD requires groundwater quality standards be met as presented and listed by the New Mexico Water Quality Control Commission (NMWQCC) in Title 20, Chapter 6, Part 2, Section 3103 (20.6.2.3103) of the New Mexico Administrative Code (NMAC). The following standards are presented for the constituents of concern (COCs) at the Site in micrograms per liter ($\mu\text{g/L}$).

- Benzene: 5.0 $\mu\text{g/L}$
- Toluene: 1,000 $\mu\text{g/L}$

- Ethylbenzene: 700 µg/L
- Total Xylenes: 620 µg/L

GROUNDWATER SAMPLING ACTIVITIES AND RESULTS

Groundwater levels were measured at all wells in January, April, July, and November 2024, with samples collected from well MW-1R during each event. Static groundwater levels were measured using an oil/water interface probe, which was decontaminated with Alconox® soap and rinsed with distilled water before each use to prevent cross-contamination. Measured depths-to-groundwater and calculated groundwater elevations are presented in Table 1. In January 2024, MW-2 and MW-3 were dry, preventing the development of a potentiometric surface and the determination of groundwater flow direction (Figure 2). By April 2024, water was present in all monitoring wells, and the inferred groundwater flow direction was to the southwest (Figure 3). In July 2024, the groundwater flow direction shifted to northeast (Figure 4), before reversing back to the south in November 2024 (Figure 5). Seasonal fluctuations, groundwater withdrawals, and surface water interactions may contribute to these variations. The Site is approximately 1,900 feet northwest of the Animas River, where groundwater levels can be influenced by hydrologic connectivity. Additionally, if the land southeast of the Site is irrigated, seasonal pumping could impact water levels and flow direction.

GROUNDWATER SAMPLING

Groundwater from monitoring well MW-1R was purged and sampled using a disposable bailer. Purging was accomplished by removing stagnant groundwater from the monitoring well prior to collecting a sample. Field measurements of groundwater quality parameters, including temperature, pH, electrical conductivity, and total dissolved solids were collected during the purging process. Following well purging, groundwater samples were placed directly into laboratory-provided containers and labeled with the date and time of collection, well designation, project name, sample collector's name, and parameters to be analyzed. Containers were immediately sealed and packed on ice to preserve samples. Samples were submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) following United State Environmental Protection Agency (EPA) Method 8260B. Proper chain-of-custody procedures were followed documenting the date and time sampled, sample number, type of sample, sample collector's name, preservative used, analyses required, and sample collector's signature.

GROUNDWATER ANALYTICAL RESULTS

In January 2024, total xylenes were detected in groundwater at MW-1R at a concentration of 820 µg/L, exceeding the NMWQCC standard. This was the only exceedance observed throughout the year, as no BTEX constituents exceeded the NMWQCC standards during the subsequent quarterly sampling events in 2024. A comprehensive summary of analytical results is provided in Table 2 and depicted on Figures 2 through 5, with complete laboratory analytical reports attached as Appendix A.

CONCLUSIONS AND RECOMMENDATIONS

BTEX concentrations in groundwater at MW-1R did not exceed NMWQCC standards for 12 consecutive sampling events between June 2019 and January 2023, reflecting a sustained reduction in COC concentrations at the site. While total xylenes exceeded the NMWQCC standard in May 2023 and January 2024, concentrations have generally shown a reduction of over 99% from peak levels. Even at the most recent exceedance of 820 µg/L, total xylenes declined by approximately 97% by November 2024, indicating only limited residual impacts remain.

Slight increases in total xylenes have historically occurred during winter and spring and appear to correlate with shifts in groundwater flow direction to the southwest—suggesting minor mobilization from residual mass near the former tank battery. During periods of southerly or northerly flow, concentrations at MW-1R decrease, further supporting this interpretation.

Benzene and toluene have remained below laboratory reporting limits for 12 consecutive sampling events, and overall trends show consistent and substantial reductions across all COCs. Given the long-term dataset, the magnitude of reduction, and the evidence of natural attenuation, the remaining low-level total xylenes are expected to continue attenuating without active remediation. As such, Ensolum/Hilcorp requests site closure and no further action for NMOCD Incident Number NCS2105634419.

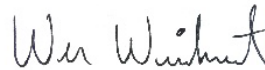
Ensolum appreciates the opportunity to provide this report to the NMOCD. If. Please contact either of the undersigned with any questions.

Sincerely,

Ensolum, LLC



Tracy Dembrowski
Project Geologist
(720) 989-6175
tdembrowski@ensolum.com



Wes Weichert, PG (Licensed in WY)
Project Geologist
(816) 266-8732
wweichert@ensolum.com

Attachments:

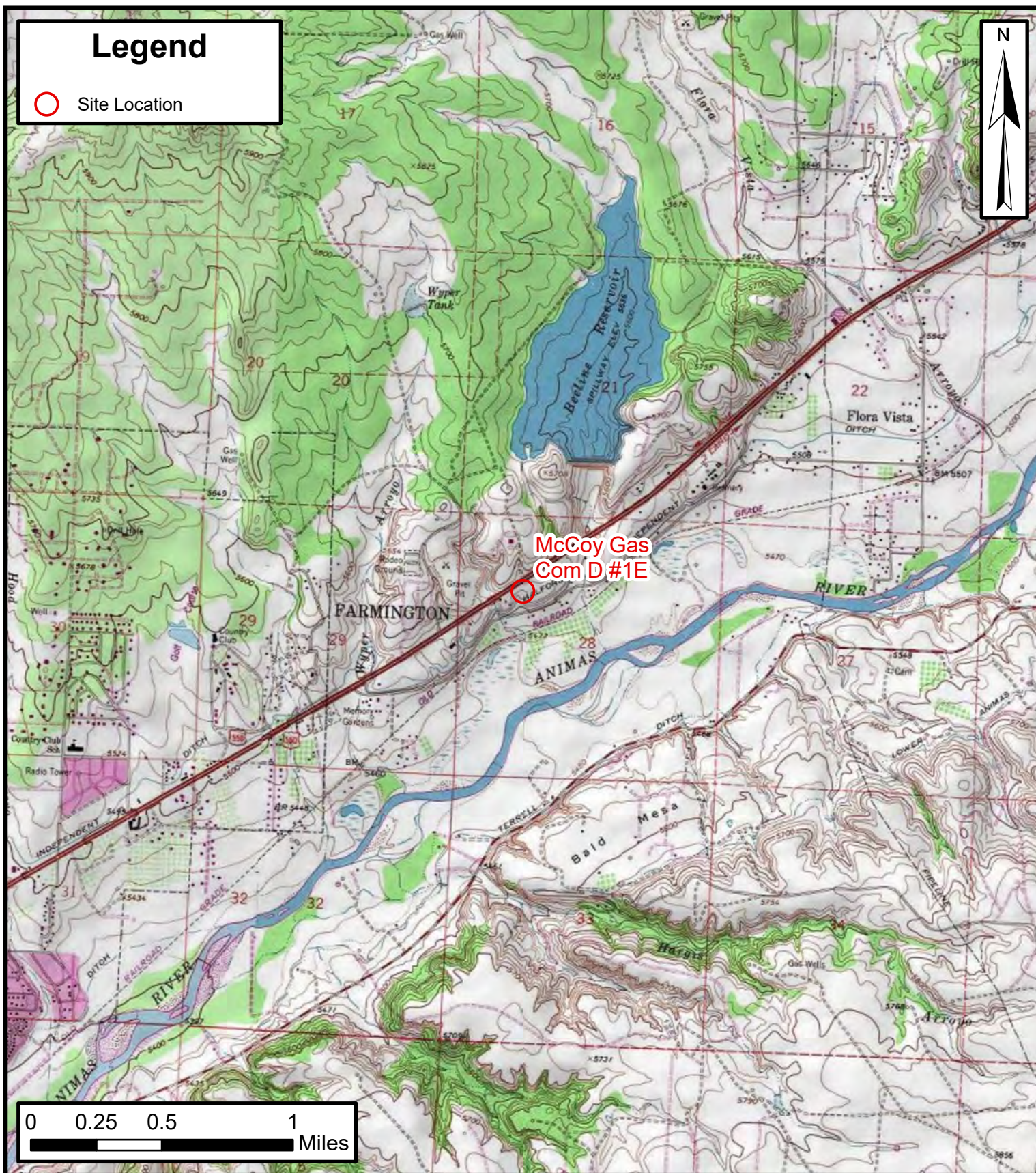
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation and Analytical Results (January 2023)
- Figure 3 Groundwater Elevation and Analytical Results (May 2023)
- Figure 4 Groundwater Elevation and Analytical Results (July 2023)
- Figure 5 Groundwater Elevation and Analytical Results (October 2023)

- Table 1 Groundwater Elevation Summary
- Table 2 Groundwater Analytical Results

- Appendix A Laboratory Analytical Reports



FIGURES



Site Location Map

McCoy Gas Com D #1E
Hilcorp Energy Company
36.78677, -108.10786
San Juan County, New Mexico

FIGURE
1

Legend

- Monitoring Wells
- Former Pit

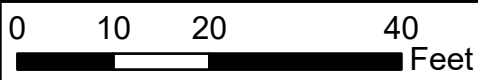


MW-2
1/16/2024
ELEV: DRY
NS

MW-1R
1/16/2024
ELEV: 5,498.51'
B: <2.0
T: <2.0
E: 160
X: **820**

MW-3
1/16/2024
ELEV: DRY
NS

Notes:
ELEV: Groundwater Elevation in Feet Above Mean Sea Level
B: Benzene (Micrograms per Liter) (µg/L)
T: Toluene (µg/L)
E: Ethylbenzene (µg/L)
X: Total Xylenes (µg/L)
NS: Not Sampled
Bold: Indicates Results Exceed NMWQCC Standard
NMWQCC: New Mexico Water Quality Conservation Commission
< : Indicates Result is Below Laboratory Reporting Limit



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Groundwater Elevation and Analytical Results (January 2024)

McCoy Gas Com D #1E
Hilcorp Energy Company
36.78677, -108.10786
San Juan County, New Mexico

FIGURE
2

Legend

- Monitoring Wells
- Former Pit
- Groundwater Elevation Contours Q2
- Estimated Groundwater Flow Direction

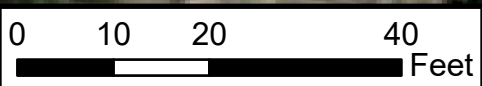


MW-2
4/29/2024
ELEV: 5,502.43'
NS

MW-1R
4/29/2024
ELEV: 5,501.62'
B: <2.0
T: <2.0
E: 73
X: 330

MW-3
4/29/2024
ELEV: 5,503.17'
NS

Notes:
ELEV: Groundwater Elevation in Feet Above Mean Sea Level
B: Benzene (Micrograms per Liter) (µg/L)
T: Toluene (µg/L)
E: Ethylbenzene (µg/L)
X: Total Xylenes (µg/L)
NS: Not Sampled
<: Indicates Result is Below Laboratory Reporting Limit

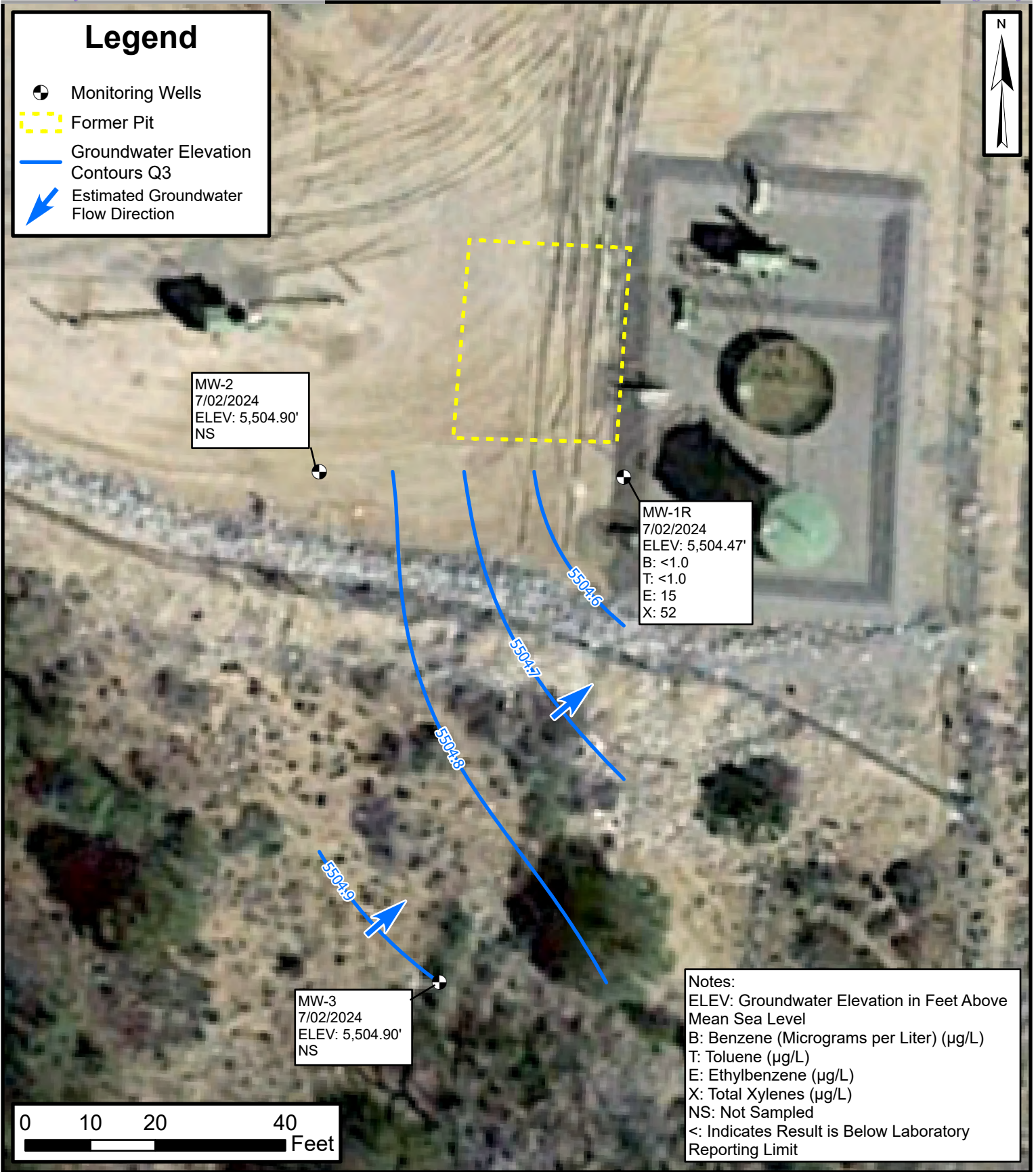


Groundwater Elevation and Analytical Results (April 2024)

McCoy Gas Com D #1E
Hilcorp Energy Company
36.78677, -108.10786
San Juan County, New Mexico

FIGURE
3

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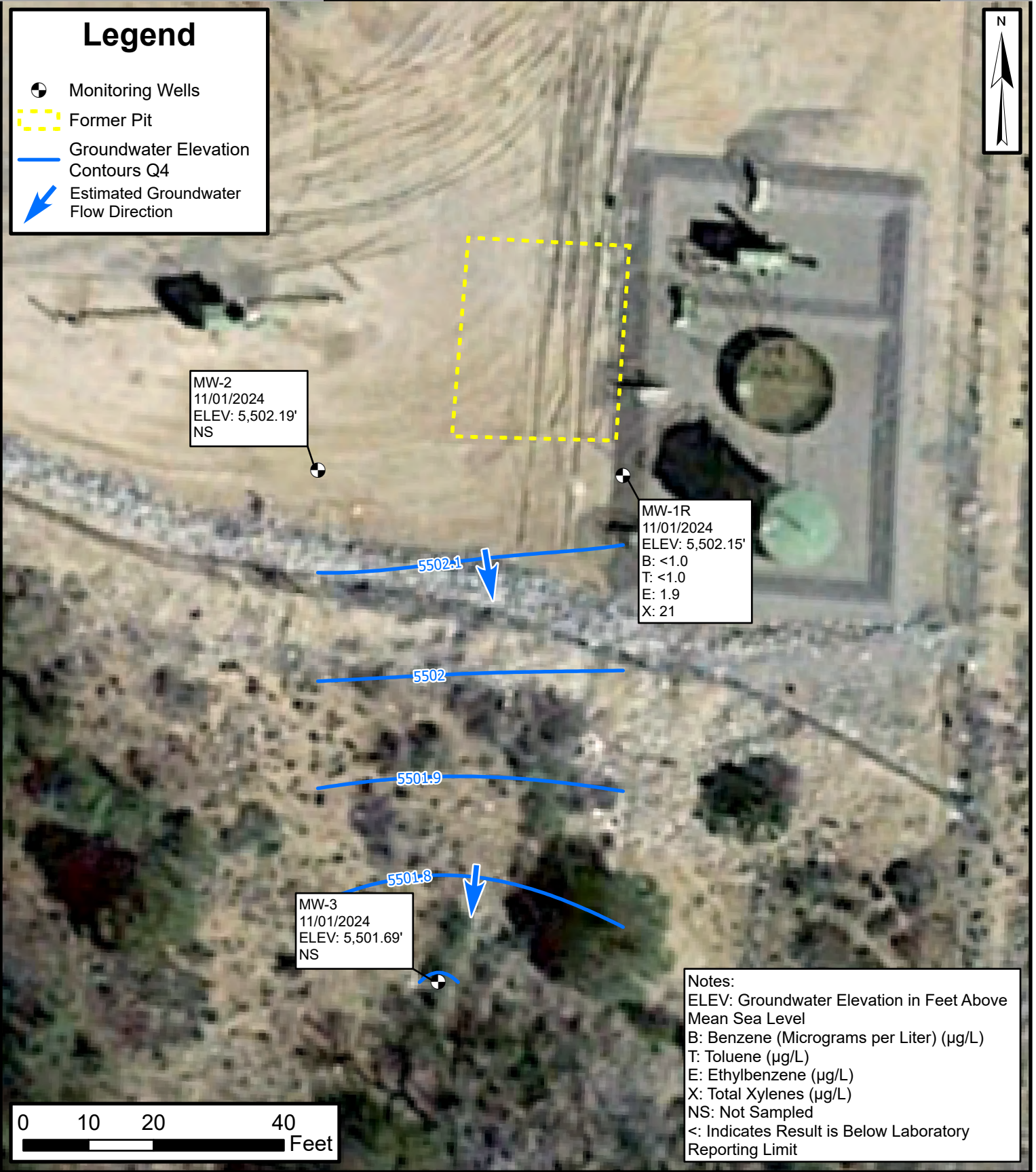


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Groundwater Elevation and Analytical Results (July 2024)
 McCoy Gas Com D #1E
 Hilcorp Energy Company
 36.78677, -108.10786
 San Juan County, New Mexico

FIGURE 4



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Groundwater Elevation and Analytical Results (November 2024)
 McCoy Gas Com D #1E
 Hilcorp Energy Company
 36.78677, -108.10786
 San Juan County, New Mexico

FIGURE 5



TABLES



TABLE 1 GROUNDWATER ELEVATIONS McCoy Gas Com D #1E Hilcorp Energy Company San Juan County, New Mexico						
Well Identification	Top of Casing Elevation (feet AMSL)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-1	5,535.13	10/16/2006	32.86	--	--	5,502.27
		5/16/2007	30.69	--	--	5,504.44
		7/23/2007	30.57	--	--	5,504.56
		9/27/2007	32.01	--	--	5,503.12
		11/27/2007	34.60	--	--	5,500.53
		5/13/2008	31.97	--	--	5,503.16
		1/21/2009	36.88	--	--	5,498.25
		5/26/2009	30.68	--	--	5,504.45
		5/25/2010	30.13	--	--	5,505.00
		8/12/2010	30.87	--	--	5,504.26
		11/17/2010	33.96	--	--	5,501.17
2/14/2011	37.27	--	--	5,497.86		
MW-1R	5,533.58	5/17/2011	29.31	--	--	5,504.27
		8/9/2011	29.04	--	--	5,504.54
		11/9/2011	31.51	--	--	5,502.07
		3/8/2012	37.41	37.07	0.34	5,496.44
		6/14/2012	28.39	28.29	0.10	5,505.27
		9/12/2012	29.89	--	--	5,503.69
		12/21/2012	34.22	34.19	0.03	5,499.38
		3/14/2013	38.31	--	--	5,495.27
		6/17/2013	28.05	--	--	5,505.53
		9/11/2013	29.11	--	--	5,504.47
		12/16/2013	34.61	--	--	5,498.97
		3/12/2014	35.78	--	--	5,497.80
		6/11/2014	28.05	--	--	5,505.53
		9/22/2014	29.25	--	--	5,504.33
		12/9/2014	34.61	--	--	5,498.97
		3/12/2015	35.55	--	--	5,498.03
		6/11/2015	28.35	--	--	5,505.23
		9/21/2015	29.20	--	--	5,504.38
		12/21/2015	34.20	--	--	5,499.38
		6/20/2016	29.20	--	--	5,504.38
		12/14/2016	34.22	--	--	5,499.36
		6/26/2017	28.95	--	--	5,504.63
		12/12/2017	34.03	--	--	5,499.55
		6/28/2018	28.42	--	--	5,505.16
		12/10/2018	33.67	--	--	5,499.91
		6/20/2019	29.59	--	--	5,503.99
		12/9/2019	34.12	--	--	5,499.46
		3/18/2020	38.79	--	--	5,494.79
6/22/2020	28.78	--	--	5,504.80		
1/26/2021	35.33	--	--	5,498.25		
6/22/2021	28.69	--	--	5,504.89		
10/27/2021	31.22	--	--	5,502.36		
2/10/2022	35.46	--	--	5,498.12		



TABLE 1 GROUNDWATER ELEVATIONS McCoy Gas Com D #1E Hilcorp Energy Company San Juan County, New Mexico							
Well Identification	Top of Casing Elevation (feet AMSL)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)	
		4/28/2022	33.78	--	--	5,499.80	
		7/29/2022	29.10	--	--	5,504.48	
		10/26/2022	31.19	--	--	5,502.39	
		1/13/2023	35.13	--	--	5,498.45	
		5/11/2023	34.46	--	--	5,499.12	
		7/24/2023	29.57	--	--	5,504.01	
		10/6/2023	30.28	--	--	5,503.30	
		1/16/2024	35.07	--	--	5,498.51	
		4/29/2024	31.96	--	--	5,501.62	
		7/2/2024	29.11	--	--	5,504.47	
		11/1/2024	31.43	--	--	5,502.15	
MW-2	5,535.68	5/17/2007	30.56	--	--	5,505.12	
		7/23/2007	31.98	--	--	5,503.70	
		9/27/2007	32.44	--	--	5,503.24	
		11/27/2007	35.29	--	--	5,500.39	
		5/13/2008	31.98	--	--	5,503.70	
		5/26/2009	36.46	--	--	5,499.22	
		5/25/2010	29.88	--	--	5,505.80	
		8/12/2010	31.30	--	--	5,504.38	
		11/17/2010	34.61	--	--	5,501.07	
		2/14/2011	Dry				
		5/17/2011	30.60	--	--	5,505.08	
		8/9/2011	31.22	--	--	5,504.46	
		11/9/2011	33.70	--	--	5,501.98	
		3/8/2012	Dry				
		6/14/2012	29.66	--	--	5,506.02	
		9/12/2012	31.77	--	--	5,503.91	
		12/21/2012	36.44	--	--	5,499.24	
		3/14/2013	Dry				
		6/17/2013	29.45	--	--	5,506.23	
		9/11/2013	31.11	--	--	5,504.57	
		12/16/2013	OBS				
		3/12/2014	OBS				
		6/11/2014	30.26	--	--	5,505.42	
		9/22/2014	31.11	--	--	5,504.57	
		12/9/2014	34.31	--	--	5,501.37	
		3/12/2015	Dry				
		6/11/2015	30.00	--	--	5,505.68	
		9/21/2015	30.96	--	--	5,504.72	
		12/21/2015	Dry				
		6/20/2016	31.63	--	--	5,504.05	
12/14/2016	Dry						
6/26/2017	30.63	--	--	5,505.05			
12/12/2017	Dry						
6/28/2018	30.10	--	--	5,505.58			



TABLE 1 GROUNDWATER ELEVATIONS McCoy Gas Com D #1E Hilcorp Energy Company San Juan County, New Mexico						
Well Identification	Top of Casing Elevation (feet AMSL)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
		12/10/2018			Dry	
		6/20/2019	31.57	--	--	5,504.11
		12/9/2019			Dry	
		3/18/2020			Dry/OBS @ 2.69	
		6/22/2020	30.37	--	--	5,505.31
		1/26/2021			Dry	
		6/22/2021			Dry/OBS @ 2.70	
		10/27/2021	33.35	--	--	5,502.33
		2/10/2022			Dry	
		4/28/2022			Dry	
		7/29/2022	30.78	--	--	5,504.90
		10/26/2022	33.32	--	--	5,502.36
		1/13/2023			Dry	
		5/11/2023			Dry	
		7/24/2023	31.25	--	--	5,504.43
		10/6/2023	32.25	--	--	5,503.43
		1/16/2024			Dry	
		4/29/2024	33.25	--	--	5,502.43
		7/2/2024	30.78	--	--	5,504.90
		11/1/2024	33.49	--	--	5,502.19
		5/17/2007	21.55	--	--	5,505.56
		7/23/2007	30.65	--	--	5,496.46
		9/27/2007	24.02	--	--	5,503.09
		11/27/2007	28.94	--	--	5,498.17
		5/12/2008	22.55	--	--	5,504.56
		5/26/2009	21.37	--	--	5,505.74
		5/25/2010	20.99	--	--	5,506.12
		8/12/2010	23.03	--	--	5,504.08
		11/17/2010	26.85	--	--	5,500.26
		2/14/2011			Dry	
		5/17/2011	21.49	--	--	5,505.62
		8/9/2011	22.12	--	--	5,504.99
		11/9/2011	25.69	--	--	5,501.42
		3/8/2012			Dry	
		6/14/2012	20.97	--	--	5,506.14
		9/12/2012	23.31	--	--	5,503.80
		12/21/2012	30.61	--	--	5,496.50
		3/14/2013			Dry	
		6/17/2013	20.80	--	--	5,506.31
		9/11/2013	22.75	--	--	5,504.36
		12/16/2013	31.95	--	--	5,495.16
		3/12/2014			Dry	
		6/11/2014	20.93	--	--	5,506.18
		9/22/2014	22.62	--	--	5,504.49
		12/9/2014	29.24	--	--	5,497.87



TABLE 1 GROUNDWATER ELEVATIONS McCoy Gas Com D #1E Hilcorp Energy Company San Juan County, New Mexico								
Well Identification	Top of Casing Elevation (feet AMSL)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)		
MW-3	5,527.11	3/12/2015	32.60	--	--	5,494.51		
		6/11/2015	21.30	--	--	5,505.81		
		9/21/2015	22.13	--	--	5,504.98		
		12/21/2015	30.65	--	--	5,496.46		
		6/20/2016	22.33	--	--	5,504.78		
		12/14/2016	31.10	--	--	5,496.01		
		6/26/2017	21.97	--	--	5,505.14		
		12/12/2017	30.44	--	--	5,496.67		
		6/28/2018	21.63	--	--	5,505.48		
		12/10/2018	29.65	--	--	5,497.46		
		6/20/2019	22.92	--	--	5,504.19		
		12/9/2019	30.79	--	--	5,496.32		
		3/18/2020	Dry					
		6/22/2020	21.72	--	--	5,505.39		
		1/26/2021	Dry					
		6/22/2021	21.76	--	--	5,505.35		
		10/27/2021	24.87	--	--	5,502.24		
		2/10/2022	Dry					
		4/28/2022	Dry					
		7/29/2022	22.28	--	--	5,504.83		
		10/26/2022	24.84	--	--	5,502.27		
		1/13/2023	Dry					
		5/11/2023	Dry					
		7/24/2023	22.54	--	--	5,504.57		
		10/6/2023	23.59	--	--	5,503.52		
		1/16/2024	Dry					
4/29/2024	23.94	--	--	5,503.17				
7/2/2024	22.21	--	--	5,504.90				
11/1/2024	25.42	--	--	5,501.69				

Notes:

AMSL: above mean sea level

BTOC: below top of casing

NP: No Product

OBS: Obstruction in well

--: indicates no GWEL or PSH measured

Groundwater elevation is adjusted using a density correction factor of 0.8 when product is present

*: New Top of Casing Elevation; Casing Cut Off 1.55 Feet to Remove ORC Socks in May 2011, well designation changed to MW-1R



TABLE 2 GROUNDWATER ANALYTICAL RESULTS McCoy Gas Com D #1E Hilcorp Energy Company San Juan County, New Mexico					
Well Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards		5	1,000	700	620
MW-1	10/16/2006	22	2,500	2,700	19,000
	5/16/2007	30	760	1,700	24,000
	5/13/2008	<10	640	540	11,000
	1/21/2009	<100	1,200	1,100	12,000
	5/26/2009	<10	620	640	11,000
	5/25/2010	130	160	430	7,100
	8/12/2010	120	<120	260	6,700
	11/17/2010	360	<2,500	1,400	16,000
	2/14/2011	16	1,000	870	13,000
MW-1R	5/17/2011	300	290	850	13,000
	8/9/2011	<5	53.6	19.3	6,220
	11/9/2011	11	<50	<5	1,600
	3/8/2012	--	--	--	--
	6/14/2012	120	110	750	5,000
	9/12/2012	78	<250	120	4,600
	12/21/2012	<25	<250	280	7,400
	3/21/2013	98	<250	<25.0	7,100
	6/17/2013	66	<250	94	4,500
	9/11/2013	33	<25	76	840
	12/13/2013	52	<100	160	2,000
	3/12/2014	100	<120	680	8,800
	6/11/2014	36	<25	430	4,100
	9/22/2014	2.7	<25	490	1,400
	12/9/2014	<9.5	<250	840	8,500
	3/12/2015	96	<25	860	8,900
	6/11/2015	<25	<250	610	5,700
	9/21/2015	25	<5	525	4,340
	12/21/2015	93	<250	765	7,850
	6/20/2016	56	<25.0	617	5,370
	12/14/2016	<25.0	<50.0	961	9,700
	6/26/2017	<12.5	<25.0	457	3,890
	12/3/2017	108	<100	790	8,050
	6/28/2018	<5.0	<5.0	430	3,200
	12/10/2018	<5.0	<5.0	730	6,400
	6/19/2019	<2.5	<2.5	4.3	<5.0
12/9/2019	<1.0	<1.0	20	<2.0	
3/18/2020	<1.0	<1.0	130	110	
6/22/2020	<2.0	<2.0	21	12	
1/26/2021	2.13	<1.0	184	305	

TABLE 2 GROUNDWATER ANALYTICAL RESULTS McCoy Gas Com D #1E Hilcorp Energy Company San Juan County, New Mexico					
Well Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards		5	1,000	700	620
MW-1R	6/22/2021	<1.0	<1.0	47	17
	10/27/2021	<2.0	<2.0	39	230
	2/10/2022	<2.0	<2.0	98	300
	4/28/2022	<2.0	<2.0	170	580
	7/29/2022	<2.0	<2.0	6.9	52
	10/26/2022	<5.0	<5.0	12.0	100
	1/13/2023	<2.0	<2.0	120	530
	5/11/2023	<2.0	<2.0	120	720
	7/24/2023	<2.0	<2.0	5.3	53
	10/6/2023	<1.0	<1.0	33	130
	1/16/2024	<2.0	<2.0	160	820
	4/29/2024	<2.0	<2.0	73	330
	7/2/2024	<1.0	<1.0	15	52
11/1/2024	<1.0	<1.0	1.9	21	
MW-2	5/17/2007	<1.0	<1.0	<1.0	3.10
	5/13/2008	<1.0	<1.0	<1.0	<2.0
	5/25/2010	<1.0	<1.0	<1.0	<2.0
MW-3	5/17/2007	<1.0	<1.0	<1.0	<2.0
	5/12/2008	<1.0	<1.0	<1.0	<2.0
	5/25/2010	<1.0	<1.0	<1.0	<2.0

Notes:

µg/L: micrograms per liter

NMWQCC: New Mexico Water Quality Control Commission

--: not analyzed

<0.037: indicates result less than the stated laboratory reporting limit (RL)

Concentrations in **bold** and highlighted exceed the New Mexico Water Quality Control Commission Standards, 20.6.2 of the New Mexico Administrative Code



APPENDIX A

Laboratory Analytical Reports



Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 03, 2024

Mitch Killough
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: McCoy Gas Com D 1E

OrderNo.: 2401845

Dear Mitch Killough:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 1/20/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2401845**

Date Reported: 2/3/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: MW-1R

Project: McCoy Gas Com D 1E

Collection Date: 1/16/2024 12:00:00 PM

Lab ID: 2401845-001

Matrix: AQUEOUS

Received Date: 1/20/2024 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: CCM
Benzene	ND	2.0		µg/L	2	1/23/2024 7:04:00 PM
Toluene	ND	2.0		µg/L	2	1/23/2024 7:04:00 PM
Ethylbenzene	160	2.0		µg/L	2	1/23/2024 7:04:00 PM
Xylenes, Total	820	30		µg/L	20	1/26/2024 11:54:26 AM
Surr: 4-Bromofluorobenzene	132	70-130	S	%Rec	2	1/23/2024 7:04:00 PM
Surr: Toluene-d8	116	70-130		%Rec	2	1/23/2024 7:04:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401845

03-Feb-24

Client: HILCORP ENERGY
Project: McCoy Gas Com D 1E

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: LCSW	Batch ID: SL102628		RunNo: 102628							
Prep Date:	Analysis Date: 1/23/2024		SeqNo: 3791695		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	116	70	130			
Toluene	19	1.0	20.00	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	13		10.00		131	70	130			S
Surr: 4-Bromofluorobenzene	12		10.00		122	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBW	Batch ID: SL102628		RunNo: 102628							
Prep Date:	Analysis Date: 1/23/2024		SeqNo: 3791707		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	13		10.00		131	70	130			S
Surr: 4-Bromofluorobenzene	12		10.00		120	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: LCSW	Batch ID: SL102711		RunNo: 102711							
Prep Date:	Analysis Date: 1/26/2024		SeqNo: 3795200		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	8.5		10.00		84.7	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBW	Batch ID: SL102711		RunNo: 102711							
Prep Date:	Analysis Date: 1/26/2024		SeqNo: 3795202		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	8.2		10.00		81.7	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Environment Testin

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2401845 RcptNo: 1
Received By: Cheyenne Cason 1/20/2024 8:05:00 AM
Completed By: Cheyenne Cason 1/20/2024 8:41:58 AM
Reviewed By: [Signature] 1/22/24

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [] No [checked] NA []
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [checked] No [] NA []
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? Yes [checked] No []

of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: [Signature] 1/22/24

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: []

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, -0.4, Good, Yes, Yogi, [], []



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ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 5/10/2024 3:04:17 PM

JOB DESCRIPTION

McCoy Gas Com D 1E

JOB NUMBER

885-3834-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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5/10/2024 3:04:17 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Laboratory Job ID: 885-3834-1



Table of Contents

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-3834-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: McCoy Gas Com D 1E

Job ID: 885-3834-1

Job ID: 885-3834-1

Eurofins Albuquerque

Job Narrative 885-3834-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 5/2/2024 7:20 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.3°C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Hilcorp Energy
 Project/Site: McCoy Gas Com D 1E

Job ID: 885-3834-1

Client Sample ID: MW-1R

Lab Sample ID: 885-3834-1

Date Collected: 04/29/24 13:30

Matrix: Water

Date Received: 05/02/24 07:20

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	ug/L			05/06/24 22:19	2
Ethylbenzene	73		2.0	ug/L			05/06/24 22:19	2
Toluene	ND		2.0	ug/L			05/06/24 22:19	2
Xylenes, Total	330		3.0	ug/L			05/06/24 22:19	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		05/06/24 22:19	2
4-Bromofluorobenzene (Surr)	101		70 - 130		05/06/24 22:19	2
Dibromofluoromethane (Surr)	99		70 - 130		05/06/24 22:19	2
Toluene-d8 (Surr)	100		70 - 130		05/06/24 22:19	2

QC Sample Results

Client: Hilcorp Energy
 Project/Site: McCoy Gas Com D 1E

Job ID: 885-3834-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-4488/3
 Matrix: Water
 Analysis Batch: 4488

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			05/06/24 14:35	1
Ethylbenzene	ND		1.0	ug/L			05/06/24 14:35	1
Toluene	ND		1.0	ug/L			05/06/24 14:35	1
Xylenes, Total	ND		1.5	ug/L			05/06/24 14:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		05/06/24 14:35	1
4-Bromofluorobenzene (Surr)	100		70 - 130		05/06/24 14:35	1
Dibromofluoromethane (Surr)	104		70 - 130		05/06/24 14:35	1
Toluene-d8 (Surr)	91		70 - 130		05/06/24 14:35	1

Lab Sample ID: LCS 885-4488/2
 Matrix: Water
 Analysis Batch: 4488

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	21.8		ug/L		109	70 - 130
Ethylbenzene	20.0	19.9		ug/L		99	70 - 130
m&p-Xylene	40.0	40.6		ug/L		101	70 - 130
o-Xylene	20.0	19.6		ug/L		98	70 - 130
Toluene	20.0	20.5		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 885-4488/9
 Matrix: Water
 Analysis Batch: 4488

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	20.0	21.6		ug/L		108	70 - 130	1	20
Ethylbenzene	20.0	19.6		ug/L		98	70 - 130	1	20
m&p-Xylene	40.0	39.8		ug/L		100	70 - 130	2	20
o-Xylene	20.0	19.3		ug/L		96	70 - 130	2	20
Toluene	20.0	19.9		ug/L		100	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-3834-1

GC/MS VOA

Analysis Batch: 4488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3834-1	MW-1R	Total/NA	Water	8260B	
MB 885-4488/3	Method Blank	Total/NA	Water	8260B	
LCS 885-4488/2	Lab Control Sample	Total/NA	Water	8260B	
LCSD 885-4488/9	Lab Control Sample Dup	Total/NA	Water	8260B	

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Lab Chronicle

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-3834-1

Client Sample ID: MW-1R
Date Collected: 04/29/24 13:30
Date Received: 05/02/24 07:20

Lab Sample ID: 885-3834-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	4488	CM	EET ALB	05/06/24 22:19

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-3834-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date																				
New Mexico	State	NM9425, NM0901	02-26-25																				
<p>The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.</p> <table border="1"> <thead> <tr> <th>Analysis Method</th> <th>Prep Method</th> <th>Matrix</th> <th>Analyte</th> </tr> </thead> <tbody> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Benzene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Ethylbenzene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Toluene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Xylenes, Total</td> </tr> </tbody> </table>				Analysis Method	Prep Method	Matrix	Analyte	8260B		Water	Benzene	8260B		Water	Ethylbenzene	8260B		Water	Toluene	8260B		Water	Xylenes, Total
Analysis Method	Prep Method	Matrix	Analyte																				
8260B		Water	Benzene																				
8260B		Water	Ethylbenzene																				
8260B		Water	Toluene																				
8260B		Water	Xylenes, Total																				
Oregon	NELAP	NM100001	02-26-25																				

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Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-3834-1

Login Number: 3834

List Source: Eurofins Albuquerque

List Number: 1

Creator: Dominguez, Desiree

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 7/15/2024 4:53:41 PM

JOB DESCRIPTION

McCoy Gas Com D 1E

JOB NUMBER

885-7403-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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7/15/2024 4:53:41 PM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Laboratory Job ID: 885-7403-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-7403-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: McCoy Gas Com D 1E

Job ID: 885-7403-1

Job ID: 885-7403-1

Eurofins Albuquerque

Job Narrative 885-7403-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 7/4/2024 9:10 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.9°C.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Hilcorp Energy
 Project/Site: McCoy Gas Com D 1E

Job ID: 885-7403-1

Client Sample ID: MW-1R

Lab Sample ID: 885-7403-1

Date Collected: 07/02/24 13:10

Matrix: Water

Date Received: 07/04/24 09:10

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/12/24 21:24	1
Ethylbenzene	15		1.0	ug/L			07/12/24 21:24	1
Toluene	ND		1.0	ug/L			07/12/24 21:24	1
Xylenes, Total	52		1.5	ug/L			07/12/24 21:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		70 - 130				07/12/24 21:24	1
Toluene-d8 (Surr)	85		70 - 130				07/12/24 21:24	1
4-Bromofluorobenzene (Surr)	108		70 - 130				07/12/24 21:24	1
Dibromofluoromethane (Surr)	107		70 - 130				07/12/24 21:24	1

QC Sample Results

Client: Hilcorp Energy
 Project/Site: McCoy Gas Com D 1E

Job ID: 885-7403-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-8304/5
 Matrix: Water
 Analysis Batch: 8304

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/12/24 12:49	1
Ethylbenzene	ND		1.0	ug/L			07/12/24 12:49	1
Toluene	ND		1.0	ug/L			07/12/24 12:49	1
Xylenes, Total	ND		1.5	ug/L			07/12/24 12:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)					07/12/24 12:49	1
Toluene-d8 (Surr)					07/12/24 12:49	1
4-Bromofluorobenzene (Surr)					07/12/24 12:49	1
Dibromofluoromethane (Surr)					07/12/24 12:49	1

Lab Sample ID: LCS 885-8304/4
 Matrix: Water
 Analysis Batch: 8304

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	171	187		ug/L		109	70 - 130
Benzene	171	198		ug/L		116	70 - 130
Chlorobenzene	171	178		ug/L		104	70 - 130
Toluene	171	178		ug/L		104	70 - 130
Trichloroethene (TCE)	171	181		ug/L		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
Toluene-d8 (Surr)	93		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

QC Association Summary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-7403-1

GC/MS VOA

Analysis Batch: 8304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7403-1	MW-1R	Total/NA	Water	8260B	
MB 885-8304/5	Method Blank	Total/NA	Water	8260B	
LCS 885-8304/4	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-7403-1

Client Sample ID: MW-1R
Date Collected: 07/02/24 13:10
Date Received: 07/04/24 09:10

Lab Sample ID: 885-7403-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	8304	JR	EET ALB	07/12/24 21:24

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-7403-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date																				
New Mexico	State	NM9425, NM0901	02-26-25																				
<p>The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.</p> <table border="1"> <thead> <tr> <th>Analysis Method</th> <th>Prep Method</th> <th>Matrix</th> <th>Analyte</th> </tr> </thead> <tbody> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Benzene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Ethylbenzene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Toluene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Xylenes, Total</td> </tr> </tbody> </table>				Analysis Method	Prep Method	Matrix	Analyte	8260B		Water	Benzene	8260B		Water	Ethylbenzene	8260B		Water	Toluene	8260B		Water	Xylenes, Total
Analysis Method	Prep Method	Matrix	Analyte																				
8260B		Water	Benzene																				
8260B		Water	Ethylbenzene																				
8260B		Water	Toluene																				
8260B		Water	Xylenes, Total																				
Oregon	NELAP	NM100001	02-26-25																				

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Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-7403-1

Login Number: 7403

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 11/7/2024 12:24:04 PM

JOB DESCRIPTION

McCoy Gas Com D 1E

JOB NUMBER

885-14714-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
11/7/2024 12:24:04 PM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Laboratory Job ID: 885-14714-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-14714-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Hilcorp Energy
Project: McCoy Gas Com D 1E

Job ID: 885-14714-1

Job ID: 885-14714-1

Eurofins Albuquerque

Job Narrative 885-14714-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 11/5/2024 7:20 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

GC/MS VOA

Method 8260B: The calibration verification standard expired 10/31/2024. The ICV/LCS was run as QC and all compounds were recovered within acceptable limits (run under an LCS sample type) and are not required by method.

Method 8260B: The calibration verification standard expired 10/31/2024 for the following compounds:

- 2-Butanone
- 2-Chlorethyl vinyl ether
- 2-Hexanone
- 4-Methyl-2-pentanone
- Acetone
- Carbon disulfide
- Iodomethane

The compounds recovered within acceptance limits and are not required by method. A second source ICV was analyzed with all compounds recovered within acceptance limits to verify CCV results.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Hilcorp Energy
 Project/Site: McCoy Gas Com D 1E

Job ID: 885-14714-1

Client Sample ID: MW-1R

Lab Sample ID: 885-14714-1

Date Collected: 11/01/24 12:30

Matrix: Water

Date Received: 11/05/24 07:20

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			11/05/24 21:30	1
Ethylbenzene	1.9		1.0	ug/L			11/05/24 21:30	1
Toluene	ND		1.0	ug/L			11/05/24 21:30	1
Xylenes, Total	21		1.5	ug/L			11/05/24 21:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		11/05/24 21:30	1
4-Bromofluorobenzene (Surr)	105		70 - 130		11/05/24 21:30	1
Dibromofluoromethane (Surr)	97		70 - 130		11/05/24 21:30	1
Toluene-d8 (Surr)	103		70 - 130		11/05/24 21:30	1

QC Sample Results

Client: Hilcorp Energy
 Project/Site: McCoy Gas Com D 1E

Job ID: 885-14714-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-15385/5
 Matrix: Water
 Analysis Batch: 15385

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			11/05/24 12:23	1
Ethylbenzene	ND		1.0	ug/L			11/05/24 12:23	1
Toluene	ND		1.0	ug/L			11/05/24 12:23	1
Xylenes, Total	ND		1.5	ug/L			11/05/24 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		11/05/24 12:23	1
4-Bromofluorobenzene (Surr)	102		70 - 130		11/05/24 12:23	1
Dibromofluoromethane (Surr)	98		70 - 130		11/05/24 12:23	1
Toluene-d8 (Surr)	107		70 - 130		11/05/24 12:23	1

Lab Sample ID: LCS 885-15385/3
 Matrix: Water
 Analysis Batch: 15385

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	17.9		ug/L		89	70 - 130
Ethylbenzene	20.0	19.8		ug/L		99	70 - 130
m&p-Xylene	40.0	39.5		ug/L		99	70 - 130
o-Xylene	20.0	19.5		ug/L		98	70 - 130
Toluene	20.0	20.1		ug/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	106		70 - 130

QC Association Summary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-14714-1

GC/MS VOA

Analysis Batch: 15385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14714-1	MW-1R	Total/NA	Water	8260B	
MB 885-15385/5	Method Blank	Total/NA	Water	8260B	
LCS 885-15385/3	Lab Control Sample	Total/NA	Water	8260B	

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Lab Chronicle

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-14714-1

Client Sample ID: MW-1R
Date Collected: 11/01/24 12:30
Date Received: 11/05/24 07:20

Lab Sample ID: 885-14714-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	15385	JR	EET ALB	11/05/24 21:30

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: McCoy Gas Com D 1E

Job ID: 885-14714-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date																				
New Mexico	State	NM9425, NM0901	02-26-25																				
<p>The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.</p> <table border="1"> <thead> <tr> <th>Analysis Method</th> <th>Prep Method</th> <th>Matrix</th> <th>Analyte</th> </tr> </thead> <tbody> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Benzene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Ethylbenzene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Toluene</td> </tr> <tr> <td>8260B</td> <td></td> <td>Water</td> <td>Xylenes, Total</td> </tr> </tbody> </table>				Analysis Method	Prep Method	Matrix	Analyte	8260B		Water	Benzene	8260B		Water	Ethylbenzene	8260B		Water	Toluene	8260B		Water	Xylenes, Total
Analysis Method	Prep Method	Matrix	Analyte																				
8260B		Water	Benzene																				
8260B		Water	Ethylbenzene																				
8260B		Water	Toluene																				
8260B		Water	Xylenes, Total																				
Oregon	NELAP	NM100001	02-26-25																				

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Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-14714-1

Login Number: 14714

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

Action 441209

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 441209
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Report accepted for record.	6/2/2026
amaxwell	To request site closure, submit a standalone report detailing the information supporting the request for closure.	6/2/2026