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March 27, 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
OH Randel #007
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: NAUTOFWCO00434

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *2024 Annual Groundwater Monitoring Report* to the New Mexico Oil Conservation Division (NMOCD) to document groundwater monitoring activities conducted at the OH Randel #007 natural gas production site (Site) during 2024. The Site is located on the Navajo Nation, in Unit D, Section 15, Township 26 North, Range 11 West, San Juan County, New Mexico (Figure 1).

SITE BACKGROUND

Comprehensive Site background, work plans, and reports are available on the NMOCD database. In December of 2017, Hilcorp acquired the Site from XTO Energy, Inc. and continued semiannual groundwater monitoring. Previous annual groundwater reports submitted by Hilcorp to the NMOCD recommended semiannual gauging of all Site wells and groundwater sampling from well MW-7 for benzene, toluene, ethylbenzene and total xylenes (BTEX) analysis. A summary of historical and current groundwater elevations are summarized in Table 1, with corresponding laboratory analytical results presented in Table 2.

SITE GROUNDWATER CLEANUP STANDARDS

The NMOCD requires groundwater-quality standards be met as presented by the New Mexico Water Quality Control Commission (NMWQCC) and listed 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 (µg/L).

- Benzene: 5.0 µg/L
- Toluene: 1,000 µg/L
- Ethylbenzene: 700 µg/L
- Total Xylenes: 620 µg/L

GROUNDWATER SAMPLING ACTIVITIES AND RESULTS

Groundwater level measurements were collected in June and December 2024 from wells MW-3, MW-4, MW-5, MW-7, MW-8, and MW-9. Groundwater samples were collected from well MW-7 during both events for laboratory analysis. Static groundwater level monitoring was conducted using an oil/water interface probe. The interface probe was decontaminated with Alconox® soap and rinsed with distilled water prior to each measurement to prevent cross-contamination. Based on semi-annual measurements, groundwater elevations remain relatively stable. Measured depths-to-groundwater and calculated groundwater elevations are provided in Table 1. The inferred groundwater flow direction is to the north/northeast as shown on the potentiometric surface maps in Figures 2 and 3.

GROUNDWATER SAMPLING

Groundwater from MW-7 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 Environmental Analysis Laboratory and subsequently Eurofins Environment Testing (formerly Hall) in Albuquerque, New Mexico, for analysis of BTEX following United State Environmental Protection Agency (EPA) Method 8021B or 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

During the June and December 2024 groundwater sampling events, benzene was detected in well MW-7 at concentrations exceeding the NMWQCC standards of 5.0 µg/L. Benzene was detected at 160 µg/L in June and 26 µg/L in December. Toluene, ethylbenzene, and xylenes were detected at concentrations below the respective NMWQCC standards during both events. Analytical results are summarized in Table 2 and depicted on Figures 2 and 3, with complete laboratory analytical reports attached as Appendix A.

CONCLUSIONS AND RECOMMENDATIONS

Overall, BTEX concentrations in groundwater from well MW-7 have shown a decreasing trend over time. Benzene concentrations, while decreasing, continue to exceed the NMWQCC standard of 5.0 µg/L, with recent detections of 160 µg/L in June 2024 and 26 µg/L in December 2024. Total xylenes concentrations have also declined and were below the standard of 620 µg/L during both 2024 sampling events; however, exceedances have occurred intermittently in prior years. Toluene concentrations have remained below the NMWQCC standard of 1,000 µg/L since 2015, and ethylbenzene concentrations have consistently been below the 700 µg/L standard since 2009. Historical analytical results and the interpreted northerly groundwater flow direction indicate dissolved-phase COCs are likely confined to the immediate vicinity of well MW-7.

Based on current and historical data gathered at the Site, Ensolum/Hilcorp recommend the following actions:

- Continue semiannual gauging of all remaining active monitoring wells and semiannual sampling of MW-7.

- Continue installation of Oxygen Release Compound (ORC®) socks in well MW-7 to promote aerobic groundwater conditions and enhance microbial biodegradation of petroleum hydrocarbon. ORC® socks, manufactured by Regenesis, provide a controlled release of molecular oxygen to support ongoing natural attenuation.
- Field screen for oxidation-reduction potential (ORP) and dissolved oxygen (DO) values in well MW-7 during semiannual sampling events to evaluate the effectiveness of ORC® socks in promoting aerobic groundwater conditions at the Site.

Ensolum appreciates the opportunity to provide these environmental services to Hilcorp. Please contact either of the undersigned with any questions.

Sincerely,

Ensolum, LLC

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Project Geologist
(816) 266-8732
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Attachments:

Figure 1	Site Location Map
Figure 2	Groundwater Elevation and Analytical Results (June 2024)
Figure 3	Groundwater Elevation and Analytical Results (December 2024)
Table 1	Groundwater Elevations
Table 2	Groundwater Analytical Results
Appendix A	Laboratory Analytical Reports

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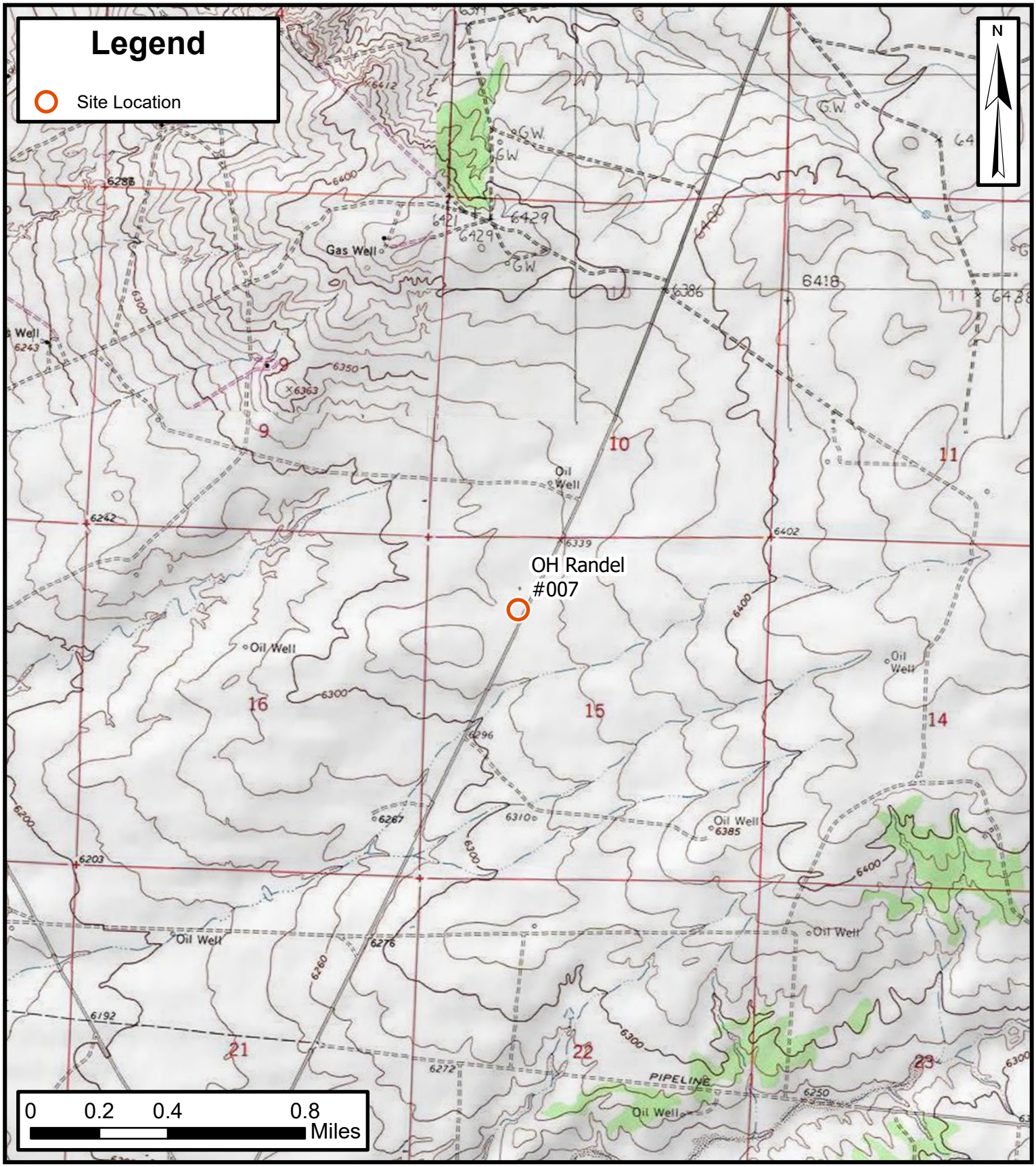
FIGURES



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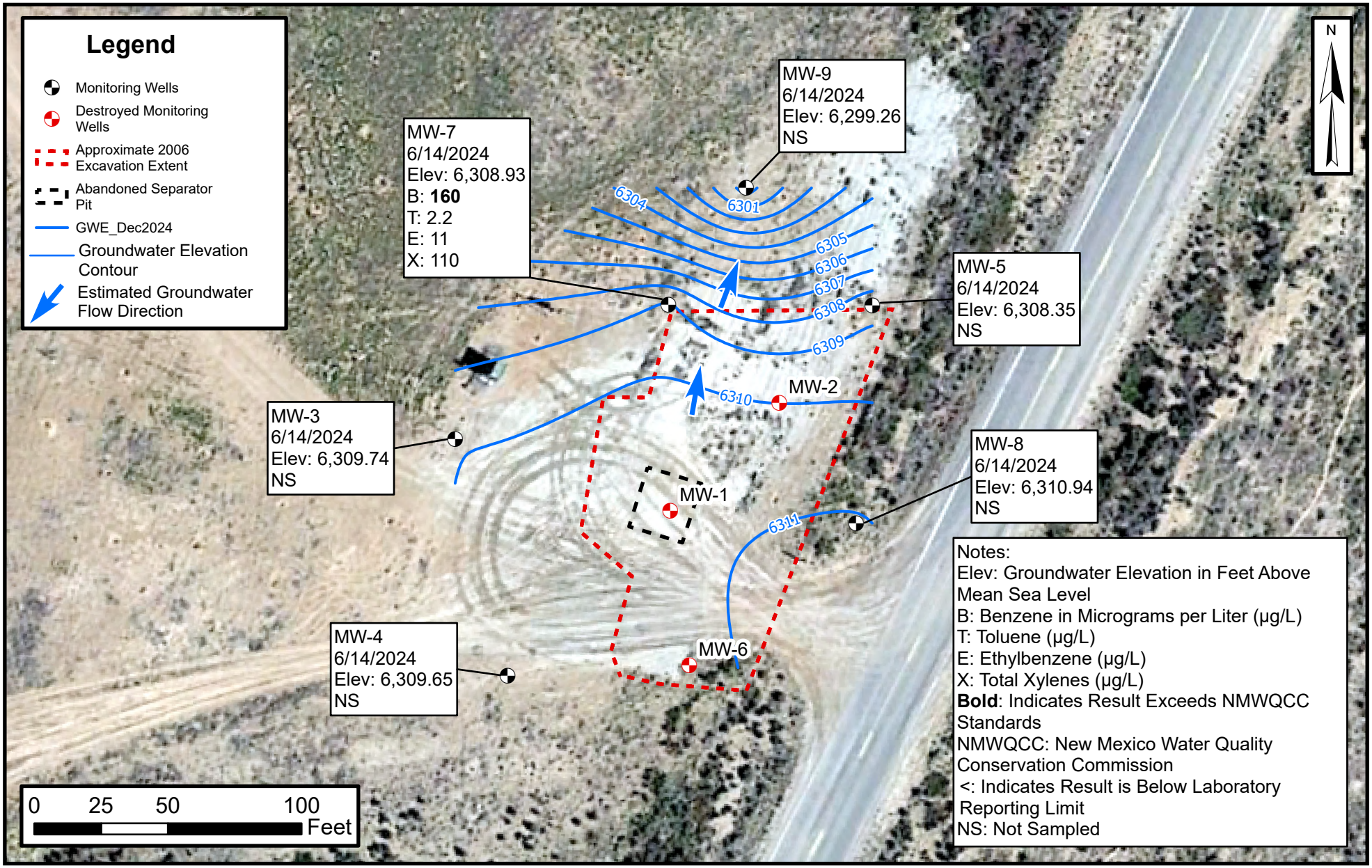
Environmental, Engineering and Hydrogeologic Consultants

Site Location Map

OH Randel #007
Hilcorp Energy Company
36.49196, -107.99549
San Juan County, New Mexico

FIGURE
1

Sources: Environmental Systems Research Institute (ESRI), National Geographic Society, i-cubed



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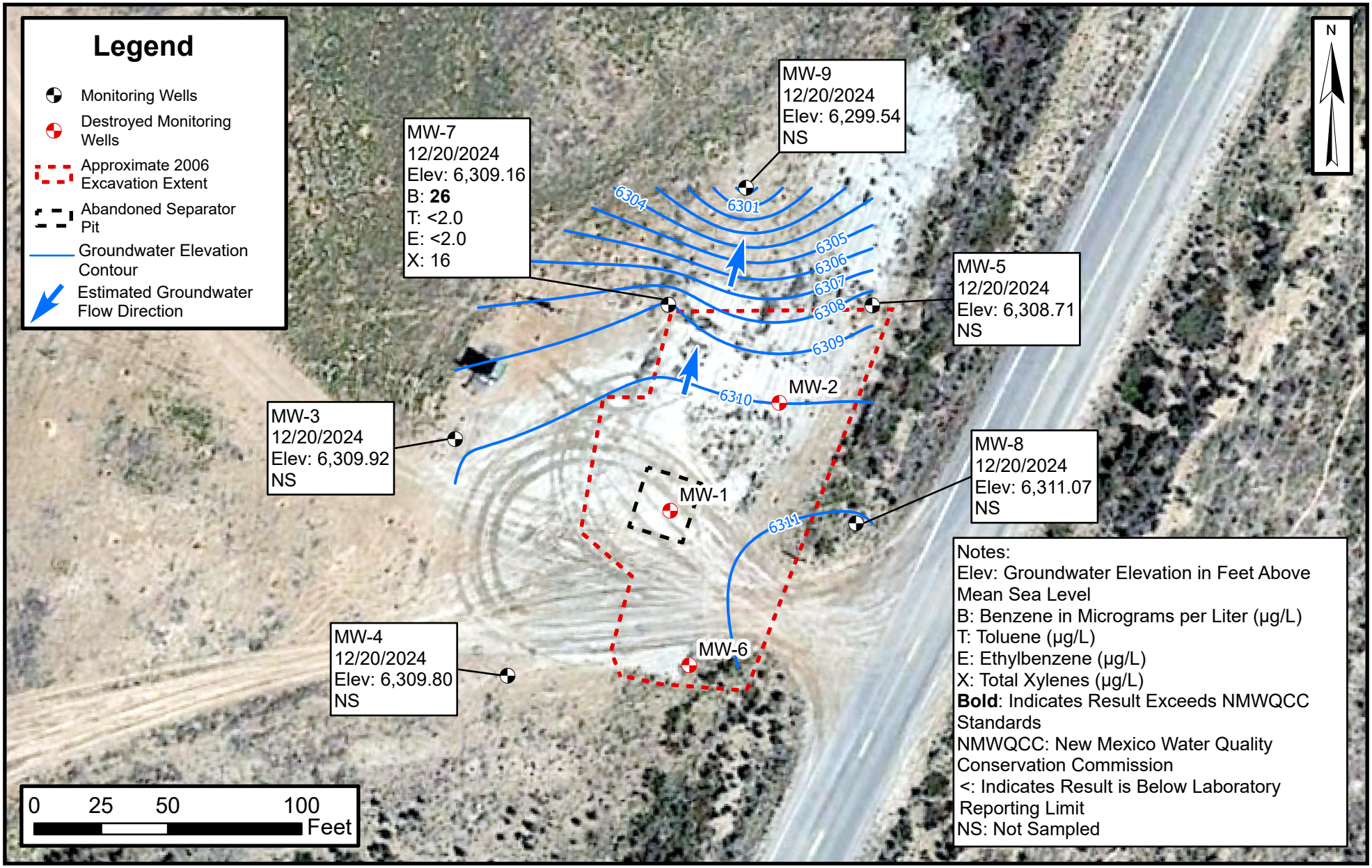
Groundwater Elevation and Analytical Results (June 2024)

OH Randel 7
Hilcorp Energy Company
36.49196, -107.99549
San Juan County, New Mexico

FIGURE
2

Sources: Google Earth



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Groundwater Elevation and Analytical Results (December 2024)

OH Randel #007
Hilcorp Energy Company
36.49196, -107.99549
San Juan County, New Mexico

FIGURE
3

Sources: Google Earth

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TABLES

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TABLE 1
GROUNDWATER ELEVATIONS
OH Randel #007
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	No Survey Data	4/22/2002	16.63	16.30	0.33	--
		4/24/2002	--	--	--	--
		8/27/2002	16.49	16.19	0.30	--
		10/08/2002	16.16	15.79	0.37	--
		5/23/2003	16.04	15.73	0.31	--
		5/28/2003	15.99	15.81	0.18	--
		6/6/2003	16.04	15.93	0.11	--
		6/18/2003	16.04	15.97	0.07	--
		6/26/2003	17.93	17.85	0.08	--
		7/31/2003	16.19	16.18	0.01	--
		8/29/2003	16.29	--	--	--
		6/21/2004	17.09	16.28	0.81	--
		9/20/2006	22.28	0.00	22.28	--
		12/5/2006 *	--	--	--	--
MW-2	No Survey Data	4/22/2002	18.32	--	--	--
		4/24/2002	18.38	18.35	0.03	--
		8/27/2002	19.86	18.92	0.94	--
		10/08/2002	18.02	17.50	0.52	--
		5/23/2003	17.83	17.30	0.53	--
		5/28/2003	17.78	17.62	0.16	--
		6/6/2003	17.83	17.71	0.12	--
		6/18/2003	17.88	17.79	0.09	--
		6/26/2003	16.09	16.05	0.04	--
		7/31/2003	15.86	--	--	--
		8/29/2003	15.99	--	--	--
		6/21/2004	16.83	16.10	0.73	--
		9/20/2006	17.15	0.00	17.15	--
		12/5/2006 *	--	--	--	--
MW-3	6,329.21	4/22/2002	16.26	--	--	6,312.95
		4/24/2002	16.25	--	--	6,312.96
		8/27/2002	15.28	--	--	6,313.93
		10/8/2002	14.74	--	--	6,314.47
		3/3/2003	15.17	--	--	6,314.04
		6/18/2003	15.16	--	--	6,314.05
		8/29/2003	15.39	--	--	6,313.82
		9/20/2006	--	--	--	--
		12/5/2006	13.85	--	--	6,315.36
		3/8/2007	13.40	--	--	6,315.81
		5/17/2007	12.87	--	--	6,316.34
		8/9/2007	12.37	--	--	6,316.84

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GROUNDWATER ELEVATIONS
OH Randel #007
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	6,329.21	5/12/2008	14.83	--	--	6,314.38
		11/7/2008	13.92	--	--	6,315.29
		7/8/2009	14.14	--	--	6,315.07
		11/5/2009	14.53	--	--	6,314.68
		5/25/2010	14.21	--	--	6,315.00
		8/12/2010	--	--	--	--
		11/17/2010	15.30	--	--	6,313.91
		2/14/2011	--	--	--	--
		5/17/2011	15.74	--	--	6,313.47
		8/9/2011	15.87	--	--	6,313.34
		11/9/2011	16.21	--	--	6,313.00
		6/17/2013	17.32	--	--	6,311.89
		12/16/2013	16.88	--	--	6,312.33
		6/11/2014	18.60	--	--	6,310.61
		12/9/2014	17.37	--	--	6,311.84
		6/11/2015	18.45	--	--	6,310.76
		12/21/2015	17.55	--	--	6,311.66
		6/20/2016	18.86	--	--	6,310.35
		12/14/2016	17.86	--	--	6,311.35
		6/26/2017	18.11	--	--	6,311.10
		12/12/2017	18.28	--	--	6,310.93
		6/28/2018	18.65	--	--	6,310.56
		12/10/2018	18.77	--	--	6,310.44
		6/19/2019	19.25	--	--	6,309.96
		12/9/2019	18.90	--	--	6,310.31
		6/22/2020	19.30	--	--	6,309.91
		12/14/2020	19.16	--	--	6,310.05
		6/22/2021	19.51	--	--	6,309.70
		12/6/2021	19.35	--	--	6,309.86
		6/16/2022	19.73	--	--	6,309.48
		12/29/2022	19.61	--	--	6,309.60
		3/22/2023	19.74	--	--	6,309.47
		12/5/2023	19.30	--	--	6,309.91
		6/14/2024	19.47	--	--	6,309.74
		12/20/2024	19.29	--	--	6,309.92
MW-4	6,328.08	4/22/2002	16.63	--	--	6,311.45
		4/24/2002	16.66	--	--	6,311.42
		8/27/2002	16.47	--	--	6,311.61
		10/8/2002	16.03	--	--	6,312.05
		3/3/2003	15.94	--	--	6,312.14

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MW-4	6,328.08	6/18/2003	16.03	--	--	6,312.05
		8/29/2003	16.29	--	--	6,311.79
		9/20/2006	--	--	--	--
		12/5/2006	13.75	--	--	6,314.33
		3/8/2007	12.55	--	--	6,315.53
		5/17/2007	13.03	--	--	6,315.05
		8/9/2007	12.59	--	--	6,315.49
		5/12/2008	12.57	--	--	6,315.51
		11/7/2008	13.68	--	--	6,314.40
		7/8/2009	13.72	--	--	6,314.36
		11/5/2009	14.12	--	--	6,313.96
		5/25/2010	13.86	--	--	6,314.22
		8/12/2010	14.39	--	--	6,313.69
		11/17/2010	14.60	--	--	6,313.48
		2/14/2011	15.55	--	--	6,312.53
		5/17/2011	14.95	--	--	6,313.13
		8/9/2011	15.11	--	--	6,312.97
		11/9/2011	15.38	--	--	6,312.70
		6/17/2013	16.33	--	--	6,311.75
		12/16/2013	15.99	--	--	6,312.09
		6/11/2014	16.30	--	--	6,311.78
		12/9/2014	16.48	--	--	6,311.60
		6/11/2015	16.14	--	--	6,311.94
		12/21/2015	16.75	--	--	6,311.33
		6/20/2016	16.98	--	--	6,311.10
		12/14/2016	16.95	--	--	6,311.13
		6/26/2017	17.09	--	--	6,310.99
		12/12/2017	17.27	--	--	6,310.81
		6/28/2018	17.53	--	--	6,310.55
		12/10/2018	17.66	--	--	6,310.42
		6/19/2019	17.89	--	--	6,310.19
		12/9/2019	17.83	--	--	6,310.25
		6/22/2020	18.09	--	--	6,309.99
		12/14/2020	18.06	--	--	6,310.02
		6/22/2021	18.31	--	--	6,309.77
		12/6/2021	18.32	--	--	6,309.76
		6/16/2022	18.45	--	--	6,309.63
		12/29/2022	18.54	--	--	6,309.54
		3/22/2023	18.67	--	--	6,309.41
		12/5/2023	18.03	--	--	6,310.05

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MW-4	6,328.08	6/14/2024	18.43	--	--	6,309.65
		12/20/2024	18.28	--	--	6,309.80
MW-5	6,333.23	4/22/2002	19.11	--	--	6,314.12
		4/24/2002	19.14	--	--	6,314.09
		8/10/2002	19.10	--	--	6,314.13
		6/18/2003	18.86	--	--	6,314.37
		6/21/2004	19.64	--	--	6,313.59
		6/28/2005	17.30	--	--	6,315.93
		9/20/2006	NM	--	--	--
		12/5/2006	18.65	--	--	6,314.58
		3/8/2007	18.15	--	--	6,315.08
		5/17/2007	17.78	--	--	6,315.45
		8/9/2007	NM	--	--	--
		5/12/2008	18.82	--	--	6,314.41
		11/7/2008	18.90	--	--	6,314.33
		7/8/2009	20.08	--	--	6,313.15
		11/5/2009	20.44	--	--	6,312.79
		5/25/2010	20.33	--	--	6,312.90
		8/12/2010	20.51	--	--	6,312.72
		11/17/2010	20.93	--	--	6,312.30
		2/14/2011	20.97	--	--	6,312.26
		5/17/2011	21.20	--	--	6,312.03
		8/9/2011	21.47	--	--	6,311.76
		11/9/2011	21.69	--	--	6,311.54
		6/17/2013	22.74	--	--	6,310.49
		12/16/2013	22.36	--	--	6,310.87
		6/11/2014	22.77	--	--	6,310.46
		12/9/2014	22.21	--	--	6,311.02
		6/11/2015	22.69	--	--	6,310.54
		12/21/2015	22.55	--	--	6,310.68
		6/20/2016	23.08	--	--	6,310.15
		12/14/2016	23.19	--	--	6,310.04
		6/26/2017	23.28	--	--	6,309.95
		12/12/2017	23.45	--	--	6,309.78
		6/28/2018	24.76	--	--	6,308.47
		12/10/2018	23.99	--	--	6,309.24
		6/19/2019	24.18	--	--	6,309.05
		12/9/2019	24.24	--	--	6,308.99
		3/13/2020	24.30	--	--	6,308.93
		6/22/2020	24.39	--	--	6,308.84

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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-5	6,333.23	12/14/2020	24.55	--	--	6,308.68
		6/22/2021	24.69	--	--	6,308.54
		12/6/2021	27.76	--	--	6,305.47
		6/16/2022	24.96	--	--	6,308.27
		12/29/2022	24.76	--	--	6,308.47
		3/22/2023	24.76	--	--	6,308.47
		12/5/2023	24.69	--	--	6,308.54
		6/14/2024	24.88	--	--	6,308.35
		12/20/2024	24.52	--	--	6,308.71
MW-6	No Survey Data	4/22/2002	18.31	--	--	--
		4/24/2002	18.32	--	--	--
		8/27/2002	--	--	--	--
		10/8/2002	18.13	16.84	1.29	--
		5/23/2003	17.95	16.62	1.33	--
		5/28/2003	17.90	16.68	1.22	--
		6/6/2003	18.00	16.80	1.20	--
		6/18/2003	18.02	16.78	1.24	--
		6/26/2003	18.10	16.88	1.22	--
		7/31/2003	19.13	17.77	1.36	--
		8/29/2003	18.34	16.88	1.46	--
		6/21/2004	18.95	17.78	1.17	--
		9/20/2006	16.87	15.79	1.08	--
		12/5/2006 *	--	--	--	--
MW-7	6,331.36	5/17/2007	15.46	--.	--	6,315.90
		8/9/2007	14.72	--	--	6,316.64
		11/27/2007	14.91	--	--	6,316.45
		5/12/2008	15.12	--	--	6,316.24
		11/7/2008	15.82	--	--	6,315.54
		7/8/2009	16.44	--	--	6,314.92
		11/5/2009	16.76	--	--	6,314.60
		5/25/2010	16.63	--	--	6,314.73
		8/12/2010	16.82	--	--	6,314.54
		11/17/2010	17.65	--	--	6,313.71
		2/14/2011	17.74	--	--	6,313.62
		5/17/2011	17.92	--	--	6,313.44
		8/9/2011	18.11	--	--	6,313.25
		11/9/2011	18.46	--	--	6,312.90
		6/17/2013	19.45	--	--	6,311.91
		12/16/2013	19.39	--	--	6,311.97
		6/11/2014	19.56	--	--	6,311.80

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MW-7	6,331.36	12/9/2014	19.67	--	--	6,311.69
		6/11/2015	19.40	--	--	6,311.96
		12/21/2015	19.50	--	--	6,311.86
		6/20/2016	19.91	--	--	6,311.45
		12/14/2016	20.04	--	--	6,311.32
		6/26/2017	20.33	--	--	6,311.03
		12/12/2017	20.44	--	--	6,310.92
		6/28/2018	20.91	--	--	6,310.45
		12/10/2018	20.94	--	--	6,310.42
		6/19/2019	21.15	--	--	6,310.21
		12/9/2019	20.95	--	--	6,310.41
		6/22/2020	21.21	--	--	6,310.15
		12/14/2020	21.16	--	--	6,310.20
		6/22/2021	21.38	--	--	6,309.98
		12/6/2021	21.34	--	--	6,310.02
		6/16/2022	25.21	--	--	6,306.15
		12/29/2022	26.19	--	--	6,305.17
		3/22/2023	27.42	--	--	6,303.94
		12/5/2023	22.53	--	--	6,308.83
		2/6/2024	21.58	--	--	6,309.78
		6/14/2024	22.43	--	--	6,308.93
		12/20/2024	22.20	--	--	6,309.16
MW-8	6,334.50	5/17/2007	19.64	--	--	6,314.86
		8/9/2007	18.94	--	--	6,315.56
		11/27/2007	19.20	--	--	6,315.30
		5/12/2008	19.97	--	--	6,314.53
		11/7/2008	19.55	--	--	6,314.95
		7/8/2009	20.01	--	--	6,314.49
		11/5/2009	20.41	--	--	6,314.09
		5/25/2010	20.31	--	--	6,314.19
		8/12/2010	20.41	--	--	6,314.09
		11/17/2010	20.63	--	--	6,313.87
		2/14/2011	20.35	--	--	6,314.15
		5/17/2011	20.30	--	--	6,314.20
		8/9/2011	20.83	--	--	6,313.67
		11/9/2011	21.00	--	--	6,313.50
		6/17/2013	22.17	--	--	6,312.33
		12/16/2013	21.40	--	--	6,313.10
		6/11/2014	22.09	--	--	6,312.41
		12/9/2014	22.80	--	--	6,311.70

ENSOLUM

TABLE 1
GROUNDWATER ELEVATIONS
OH Randel #007
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-8	6,334.50	6/11/2015	21.76	--	--	6,312.74
		12/21/2015	22.83	--	--	6,311.67
		6/20/2016	22.40	--	--	6,312.10
		12/14/2016	23.54	--	--	6,310.96
		6/26/2017	22.28	--	--	6,312.22
		12/12/2017	22.70	--	--	6,311.80
		6/28/2018	23.02	--	--	6,311.48
		12/10/2018	23.21	--	--	6,311.29
		6/19/2019	23.28	--	--	6,311.22
		12/9/2019	23.50	--	--	6,311.00
		6/22/2020	23.85	--	--	6,310.65
		12/14/2020	24.27	--	--	6,310.23
		6/22/2021	24.82	--	--	6,309.68
		12/6/2021	25.51	--	--	6,308.99
		6/16/2022	25.57	--	--	6,308.93
		12/29/2022	23.33	--	--	6,311.17
		3/22/2023	23.45	--	--	6,311.05
		12/5/2023	23.33	--	--	6,311.17
		6/14/2024	23.56	--	--	6,310.94
		12/20/2024	23.43	--	--	6,311.07
MW-9	6,330.36	7/8/2009	35.26	--	--	6,295.10
		11/5/2009	33.08	--	--	6,297.28
		5/25/2010	29.28	--	--	6,301.08
		8/12/2010	31.12	--	--	6,299.24
		5/25/2010	20.31	--	--	6,310.05
		8/12/2010	20.41	--	--	6,309.95
		11/17/2010	30.49	--	--	6,299.87
		2/14/2011	31.60	--	--	6,298.76
		5/17/2011	30.39	--	--	6,299.97
		8/9/2011	29.84	--	--	6,300.52
		11/9/2011	28.76	--	--	6,301.60
		6/17/2013	28.36	--	--	6,302.00
		12/16/2013	27.97	--	--	6,302.39
		6/11/2014	28.68	--	--	6,301.68
		12/9/2014	28.45	--	--	6,301.91
		6/11/2015	28.98	--	--	6,301.38
		12/21/2015	28.22	--	--	6,302.14
		6/20/2016	28.66	--	--	6,301.70
		12/14/2016	28.42	--	--	6,301.94
		6/26/2017	29.05	--	--	6,301.31

ENSOLUM

TABLE 1
GROUNDWATER ELEVATIONS
OH Randel #007
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-9	6,630.36	12/12/2017	29.00	--	--	6,301.36
		6/28/2018	29.48	--	--	6,300.88
		12/10/2018	29.48	--	--	6,300.88
		6/19/2019	30.09	--	--	6,300.27
		12/9/2019	30.20	--	--	6,300.16
		6/22/2020	30.50	--	--	6,299.86
		12/14/2020	30.32	--	--	6,300.04
		6/22/2021	30.54	--	--	6,299.82
		12/6/2021	30.63	--	--	6,299.73
		6/16/2022	30.84	--	--	6,299.52
		12/29/2022	30.97	--	--	6,299.39
		3/22/2023	30.83	--	--	6,299.53
		12/5/2023	31.44	--	--	6,298.92
		6/14/2024	31.10	--	--	6,299.26
		12/20/2024	30.82	--	--	6,299.54

Notes:

Wells previously destroyed and/or plugged and abandoned are not presented on this table.

AMSL: above mean sea level

BTOC: below top of casing

--: indicates no GWEL or PSH measured

ENSOLUM

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
OH Randel #007
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		**5.0**	**1,000**	**700**	**620**
MW-3	4/24/2002	**24**	2.4	0.58	200
	8/27/2002	**9.4**	ND	ND	150
	3/3/2003	**5.5**	ND	ND	43
	6/18/2003	**6.1**	0.97	ND	43
	8/29/2003	3.2	0.53	ND	24
	12/5/2006	<1.0	<1.0	<1.0	<3.0
	3/8/2007	ND	ND	ND	3.8
	5/17/2007	<1.0	<1.0	<1.0	<2.0
	8/9/2007	<1.0	<1.0	<1.0	<2.0
MW-4	4/24/2002	ND	0.59	ND	2.1
	8/27/2002	1.3	ND	ND	3.5
	3/3/2003	4.2	ND	ND	5
	6/18/2003	**6.2**	ND	ND	4.5
	8/29/2003	**8.3**	ND	ND	4.3
	12/5/2006	<1.0	<1.0	<1.0	<3.0
	3/8/2007	ND	ND	ND	ND
	5/17/2007	<1.0	<1.0	<1.0	<2.0
	8/9/2007	<1.0	<1.0	<1.0	<2.0
MW-5	4/24/2002	**510**	0.64	8.9	240
	6/18/2003	**1,100**	20	ND	**660**
	6/21/2004	**2,000**	ND	ND	260
	6/28/2005	**1,100**	15	ND	160
	12/5/2006	**37**	<1.0	<1.0	4.1
	3/8/2007	ND	ND	ND	ND
	5/17/2007	<1.0	<1.0	<1.0	<2.0
MW-7	5/17/2007	**8,500**	**17,000**	**980**	**16,000**
	8/9/2007	**9,800**	**11,000**	**770**	**12,000**
	11/27/2007	**12,000**	**9,000**	**940**	**13,000**
	5/12/2008	**7,900**	**11,000**	**830**	**12,000**
	11/7/2008	**12,000**	**16,000**	**1,100**	**17,000**
	7/8/2009	**9,800**	**8,200**	<100	**12,000**
	11/5/2009	**9,800**	**7,900**	570	**13,000**
	5/25/2010	**7,200**	**3,800**	440	**11,000**

ENSOLUM

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
OH Randel #007
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		5.0	1,000	700	620
MW-7	8/12/2010	**82**	58	9.2	200
	11/17/2010	**5,200**	**5,500**	76	**3,400**
	2/14/2011	**2,200**	**1,000**	<120	**1,800**
	5/17/2011	**500**	190	16	180
	8/9/2011	**81.3**	36.9	5.3	39.4
	11/9/2011	**26**	16	2.3	20
	6/17/2013	0.72	<5.0	<0.50	<1.5
	12/16/2013	**130**	<50	7.6	62
	6/11/2014	**7,600**	**6,400**	100	**5,900**
	12/9/2014	**9,400**	**2,600**	250	**6,100**
	6/11/2015	**8,300**	960	410	**7,200**
	12/21/2015	**9,040**	67.6	465	**7,310**
	6/20/2016	**9,160**	412	615	**8,750**
	12/14/2016	**8,400**	368	284	**6,950**
	6/26/2017	**6,580**	<10.0	126	**3,950**
	12/12/2017	**9,050**	<50.0	406	**7,020**
	6/28/2018	**8,300**	6.2	220	**6,100**
	12/10/2018	**8,400**	<10.0	320	**6,200**
	6/19/2019	**14,000**	<50	540	**12,000**
	12/9/2019	**6,800**	<50	330	**5,700**
	6/22/2020	**830**	<5.0	22	**640**
	12/14/2020	**9,400**	<20	470	**6,600**
	6/22/2021	**5,400**	<5.0	250	**4,000**
	12/6/2021	**7,400**	<10	460	**5,900**
	6/16/2022	**3,700**	<10	240	**3,200**
	12/29/2022	**3,400**	<10	230	**2,300**
	3/22/2023	**2,700**	<10	28	**1,800**
	12/5/2023	**1,600**	<10	130	530
	6/14/2024	**160**	2.2	11	110
	12/20/2024	**26**	<2.0	<2.0	16
MW-8	5/17/2007	<1.0	1.9	<1.0	3.7
	8/9/2007	<1.0	<1.0	<1.0	<2.0
	11/27/2007	**21.0**	<1.0	<1.0	<2.0

ENSOLUM

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
OH Randel #007
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		**5.0**	**1,000**	**700**	**620**
MW-8	5/12/2008	1.4	<1.0	<1.0	<2.0
	11/7/2008	1.2	<1.0	<1.0	<2.0
	7/8/2009	p	<1.0	<1.0	<2.0
	11/5/2009	1.1	<1.0	<1.0	<2.0
MW-9	7/8/2009	**91**	160	6.9	100
	11/30/2009	<1.0	<1.0	<1.0	<2.0
	5/25/2010	<1.0	<1.0	<1.0	<2.0
	8/12/2010	<0.5	<5.0	<0.5	<1.5
	11/17/2010	2.4	<5.0	<0.5	<1.5

Notes:

Wells previously destroyed and/or plugged and abandoned are not presented on this table.

µg/L: micrograms per liter

ND: not detected above laboratorty reporting limit

NMWQCC: New Mexico Water Quality Control Commission

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

*Concentrations in **bold** and highlighted exceed the New Mexico Water Quality Control Commission Standards, 20.6.2.3103 of the New Mexico Administrative Code.*

ENSOLUM

APPENDIX A

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Samantha Grabert
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 7/10/2024 1:43:51 PM

JOB DESCRIPTION

OH Randel #7

JOB NUMBER

885-6354-1

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
7/10/2024 1:43:51 PM

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

Client: Hilcorp Energy
Project/Site: OH Randel #7

Laboratory Job ID: 885-6354-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

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: OH Randel #7

Job ID: 885-6354-1

Job ID: 885-6354-1 Eurofins Albuquerque

Job Narrative
885-6354-1

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 6/15/2024 1:00 PM. 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 3.3°C.

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

Client Sample ID: MW-7

Date Collected: 06/14/24 13:45
Date Received: 06/15/24 13:00

Lab Sample ID: 885-6354-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	160		2.0		ug/L			06/27/24 21:12	2
Ethylbenzene	11		2.0		ug/L			06/27/24 21:12	2
Toluene	2.2		2.0		ug/L			06/27/24 21:12	2
Xylenes, Total	110		3.0		ug/L			06/27/24 21:12	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*06/27/24 21:12*	*2*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*06/27/24 21:12*	*2*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*06/27/24 21:12*	*2*
Toluene-d8 (Surr)	*94*		*70 - 130*		*06/27/24 21:12*	*2*

QC Sample Results

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

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

Lab Sample ID: MB 885-7436/10
Matrix: Water
Analysis Batch: 7436

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			06/27/24 13:34	1
Ethylbenzene	ND		1.0		ug/L			06/27/24 13:34	1
Toluene	ND		1.0		ug/L			06/27/24 13:34	1
Xylenes, Total	ND		1.5		ug/L			06/27/24 13:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*06/27/24 13:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*06/27/24 13:34*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*06/27/24 13:34*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*06/27/24 13:34*	*1*

Lab Sample ID: LCS 885-7436/9
Matrix: Water
Analysis Batch: 7436

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.1	23.9		ug/L		119	70 - 130		
Toluene			20.2	21.3		ug/L		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 885-6354-1 MS
Matrix: Water
Analysis Batch: 7436

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	160		40.2	206	E 4	ug/L		112	70 - 130		
Toluene	2.2		40.3	43.3		ug/L		102	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: 885-6354-1 MSD
Matrix: Water
Analysis Batch: 7436

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	160		40.2	205	E 4	ug/L		109	70 - 130	1	20
Toluene	2.2		40.3	44.1		ug/L		104	70 - 130	2	20

QC Sample Results

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

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

Lab Sample ID: 885-6354-1 MSD
Matrix: Water
Analysis Batch: 7436

Client Sample ID: MW-7
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	95		70 - 130

QC Association Summary

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

GC/MS VOA

Analysis Batch: 7436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6354-1	MW-7	Total/NA	Water	8260B	
MB 885-7436/10	Method Blank	Total/NA	Water	8260B	
LCS 885-7436/9	Lab Control Sample	Total/NA	Water	8260B	
885-6354-1 MS	MW-7	Total/NA	Water	8260B	
885-6354-1 MSD	MW-7	Total/NA	Water	8260B	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

Client Sample ID: MW-7

Date Collected: 06/14/24 13:45
Date Received: 06/15/24 13:00

Lab Sample ID: 885-6354-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	7436	JR	EET ALB	06/27/24 21:12

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-6354-1

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

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.

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

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

email or Fax#: Brandon.Sinclair@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

OH Randel #7

Project #:

Project Manager:

Samantha Grabert

Sampler: Brandon Sinclair

On Ice: ☒ Yes ☐ No Yog

# of Coolers: 1

Cooler Temp(including CF): 3.3+0=3.3 c

HALL ENVIRONMENT
ANALYSIS LABORATO
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

885-6354 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX 8260
6-14	1345	Water	MW-7	(3) 40ml VOA Vial	HCL		X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/14/24	1546				6/14/24	1546
6/14/24	1718			courier	6/15/24	13:00

Remarks: Special Pricing See Andy Freeman

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

7/10/2024

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-6354-1

Login Number: 6354 **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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Samantha Grabert
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 1/6/2025 1:48:16 PM

JOB DESCRIPTION

OH Randel #7

JOB NUMBER

885-17484-1

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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1/6/2025 1:48:16 PM

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

Client: Hilcorp Energy
Project/Site: OH Randel #7

Laboratory Job ID: 885-17484-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-17484-1

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: OH Randel #7

Job ID: 885-17484-1

Job ID: 885-17484-1 Eurofins Albuquerque

Job Narrative
885-17484-1

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 12/21/2024 5:35 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 2.0°C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 885-18783 recovered above the upper control limit for Vinyl Chloride. The specific analytes requested in the samples associated with this CCV are not reported; therefore, the data have been reported.

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-17484-1

Client Sample ID: MW-7

Date Collected: 12/20/24 13:00
Date Received: 12/21/24 05:35

Lab Sample ID: 885-17484-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**26**		2.0		ug/L			12/31/24 07:12	2
Ethylbenzene	ND		2.0		ug/L			12/31/24 07:12	2
Toluene	ND		2.0		ug/L			12/31/24 07:12	2
Xylenes, Total	**16**		3.0		ug/L			12/31/24 07:12	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*12/31/24 07:12*	*2*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*12/31/24 07:12*	*2*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*12/31/24 07:12*	*2*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/31/24 07:12*	*2*

QC Sample Results

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-17484-1

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

Lab Sample ID: MB 885-18783/35
Matrix: Water
Analysis Batch: 18783

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			12/31/24 00:39	1
Ethylbenzene	ND		1.0		ug/L			12/31/24 00:39	1
Toluene	ND		1.0		ug/L			12/31/24 00:39	1
Xylenes, Total	ND		1.5		ug/L			12/31/24 00:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*12/31/24 00:39*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*12/31/24 00:39*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*		*12/31/24 00:39*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*12/31/24 00:39*	*1*

Lab Sample ID: LCS 885-18783/34
Matrix: Water
Analysis Batch: 18783

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.1	23.4		ug/L		116	70 - 130		
Toluene			20.2	20.1		ug/L		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

QC Association Summary

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-17484-1

GC/MS VOA

Analysis Batch: 18783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-17484-1	MW-7	Total/NA	Water	8260B	
MB 885-18783/35	Method Blank	Total/NA	Water	8260B	
LCS 885-18783/34	Lab Control Sample	Total/NA	Water	8260B	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: OH Randel #7

Job ID: 885-17484-1

Client Sample ID: MW-7

Date Collected: 12/20/24 13:00
Date Received: 12/21/24 05:35

Lab Sample ID: 885-17484-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	18783	CM	EET ALB	12/31/24 07:12

Laboratory References:

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Job ID: 885-17484-1
Project/Site: OH Randel #7

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

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.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Benzene
8260B		Water	Ethylbenzene
8260B		Water	Toluene
8260B		Water	Xylenes, Total

Oregon	NELAP	NM100001	02-25-25

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

email or Fax#: Brandon.Sinclair@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

OH Randel #7

Project #:

Project Manager:

Samantha Grabert

Sampler: Brandon Sinclair

On Ice: ☒ Yes ☐ No mojo

# of Coolers: 1

Cooler Temp(including CF): 1.9 +0.1 = 2.0 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

885-17484 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX 8260
12-20	1300	Water	MW-7	(3) 40ml VOA Vial	HCL		X

Date: 12/20/24 Time: 1543 Relinquished by: [signature]

Received by: [signature] Via: Date 12/20/24 Time 1543

Date: 12/20/24 Time: 1724 Relinquished by: [signature]

Received by: [signature] Via: Courier Date 12/21 Time 5:35

Remarks: Special Pricing See Andy Freeman

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

1/6/2025

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-17484-1

Login Number: 17484 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 446225
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	The 2024 Annual Groundwater Monitoring Report for OH Randel #007 Incident ID#NAUTOFWC00434 has been accepted for the record. Site is located on Navajo Nation Lands.	4/7/2025