REVIEWED By Mike Buchanan at 9:17 am, May 31, 2024



ENSOLUM

March 29, 2024

New Mexico Oil Conservation Division

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

Re: 2023 Annual Groundwater Monitoring Report Johnston Federal #4 San Juan County, New Mexico Hilcorp Energy Company NMOCD Incident Number: NAUTOFAB000306 NMOCD Administrative Order: 3RP-71

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this 2023 Annual Groundwater Monitoring Report to the New Mexico Oil Conservation Division (NMOCD) to document groundwater monitoring activities conducted at the Johnston Federal #4 metering station (Site) during 2023. The Site is partially located on surface owned by the federal government and managed by the Bureau of Land Management (BLM) and partially located on private land within Unit M, Section 27, Township 31 North and Range 9 West, San Juan County, New Mexico (Figure 1).

SITE BACKGROUND

Initial investigations were performed by Burlington Resources (Burlington, a previous operator of the Site) in August 1998 to assess two historical production pits (shown on Figure 2). Soil samples were collected from each pit and analyzed for total petroleum hydrocarbons (TPH). TPH concentrations from samples collected at Production Pit #1 was compliant with NMOCD standards and this pit was subsequently granted closure by NMOCD. Soil analyzed from Production Pit #2 was analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and TPH, with results indicating exceedances of NMOCD standards. Based on sampling results, Burlington excavated approximately 3,055 cubic yards of petroleum hydrocarbon-impacted soil in December 1998. The NMOCD subsequently requested Burlington install monitoring wells to assess potential impacts to groundwater at the Site.

In May 1999, monitoring well MW-1 was installed at the Site to a depth of 50 feet below ground surface (bgs). ConocoPhillips Company acquired Burlington in March 2006 and installed three additional monitoring wells (MW-2, MW-3, and MW-4) in 2008 to further assess groundwater impacts related to the former Production Pit #2. To remediate dissolved phase hydrocarbons from groundwater, four mobile dual phase extraction (MDPE) events were conducted in well MW-1 in August 2013, November 2014, April 2015, and November 2017. Recovered liquids were discharged to the on-Site evaporation tank. Vapors recovered during the events were used as fuel and burned in the MDPE internal combustion engine. A total of approximately 298 gallons equivalent of hydrocarbons (liquid and vapor) were removed from MW-1 during these events.

Review of the 2023 Annual Groundwater Monitoring Report for Johnston Federal #4: Content Satisfactory 1. Continue to annually sample to assess BTEX concentrations in MW-1 and MW-4, and dissolved Mn concentration in MW-1, MW-3 and MW-4. 2. Report findings and recommendations to NMOCD after assessment has been complete. 3. Upload the 2024 Annual Groundwater Monitoring Report by

Hilcorp Energy Company 2023 Annual Groundwater Monitoring Report Johnston Federal #4

Hilcorp acquired the Site from ConocoPhillips Company in April 2017 and assumed groundwater monitoring responsibilities. Additionally, El Paso CGP Company (El Paso) is a co-producer on the Site well pad and owns additional Site monitoring wells, from which non-aqueous phase liquid (LNAPL), otherwise known as free product or phase separated hydrocarbons (PSH), is being recovered. El Paso groundwater impacts are down gradient from the ConocoPhillips-installed monitoring wells.

Based on the review of the 2021 Annual Groundwater Monitoring Report, prepared by WSP USA, Inc. and dated March 4, 2022, the NMOCD concurred with the following recommendations in their February 6, 2023 approval: discontinue sampling all Site wells for sulfate analysis; discontinue BTEX analysis for wells MW-2 and MW-3; and continue sampling for dissolved manganese from wells MW-1, MW-3, and MW-4.

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 constituents of concern (COCs) at the Site in milligrams per liter (mg/L).

- Benzene: 0.005 mg/L
- Toluene: 1.0 mg/L
- Ethylbenzene: 0.70 mg/L
- Total Xylenes: 0.62 mg/L
- Dissolved Manganese: 0.20 mg/L

In addition, NMWQCC standards state LNAPLs (or PSH) shall not be present floating on the groundwater table.

GROUNDWATER SAMPLING ACTIVITIES AND RESULTS

Groundwater monitoring at the Site was performed by Hilcorp and included annual gauging and sampling from wells MW-1 through MW-4 on August 3, 2023. In addition, an additional gauging event was performed on March 20, 2023, to assess the potential presence of PSH in well MW-2 that was anomalously detected during the 2022 annual sampling event. Samples were not collected for laboratory analysis from MW-1 due to the presence of PSH during the sampling event. Static groundwater-level measurements included recording depth-to-groundwater and PSH, where detected, using a Keck 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. Measured depths-to-groundwater and PSH, as well as calculated groundwater elevations, are presented in Table 1 and were used to develop a groundwater measurements, the inferred groundwater flow direction is to the east.

GROUNDWATER SAMPLING

Groundwater was purged and sampled from wells MW-3 and MW-4 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, and electrical conductivity, were collected during the purging process, and are presented in Table 2.

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. The samples were immediately sealed, packed on ice, and submitted to Hall Environmental Analysis Laboratory (Hall) for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8260B, and dissolved manganese by EPA Method 200.7. 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 annual groundwater-sampling event, PSH was present in well MW-1 at a thickness of 0.05 feet. Benzene was detected in groundwater from well MW-4 at a concentration exceeding the applicable NMWQCC standard. Dissolved manganese was also detected at concentrations above the NMWQCC standard in wells MW-3 and MW-4. No other constituents of concern were detected in groundwater above NMWQCC standards in any of the wells sampled during the August 2023 sampling event. A summary of analytical results is presented in Table 3 and depicted on Figure 4, with complete laboratory analytical reports attached as Appendix A.

CONCLUSIONS

Elevated concentrations of BTEX constituents have been continually present in wells MW-1 and MW-4 since groundwater was first monitored at the Site in 1999. Additionally, the presence of PSH in well MW-1 has varied since 2016. During the August 2023 sampling event, PSH was identified in well MW-2 and conversely not present in well MW-1. As described in the *2022 Annual Groundwater Monitoring Report* dated March 23, 2023, well MW-2 is hydrogeologically upgradient from the source area and other wells located at the Site and has never contained PSH and/or detections of COCs above NMWQCC standards. Based on the gauging activities performed in 2023 and the anomalous presence of PSH in well MW-2 in 2022, it is believed that the well was either misidentified during the 2022 field work and/or cross contamination of the interface probe occurred prior to gauging well MW-2.

Overall concentrations of BTEX have decreased over time at the Site and wells MW-3 and MW-4 indicate PSH has not migrated downgradient from well MW-1 since it was first measured in 2016. However, benzene and total xylenes concentrations significantly increased in 2023 as compared to historical results. Significant work is being performed at the adjacent El Paso remediation site, including air sparging within the groundwater, which may be contributing to unexpected conditions at the Site. Air sparging can cause mounding of the groundwater table and movement and groundwater and associated dissolved contaminants to locations not previously impacted. Based on the air sparge system location directly north and west of well MW-4, impacts from the adjacent remediation site may be contributing to increased concentrations within MW-4.

Dissolved manganese has been present at concentrations exceeding NMWQCC standards in wells MW-1, MW-3, and MW-4. Elevated dissolved manganese concentrations in these wells appear to be a result of generally low-oxygen and reducing groundwater conditions in these wells, which is a common biproduct of petroleum hydrocarbon degradation in groundwater systems. This is further evidenced by the low concentrations of dissolved manganese in the hydrogeologically upgradient well MW-2, which is outside and upgradient of the original petroleum-hydrocarbon plume. As groundwater conditions at the Site continue to equilibrate and dissolved oxygen increases, groundwater conditions will become increasingly aerobic. As this happens, dissolved manganese has the ability to precipitate out of solution, leading to decreased concentrations in groundwater.



Johnston Federal #4

RECOMMENDATIONS

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

 Continue annual sampling to assess BTEX concentrations in wells MW-1 and MW-4 and dissolved manganese concentrations in wells MW-1, MW-3, and MW-4.

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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Attachments:

- Figure 1 Site Location Map
- Figure 2 Site Map
- Figure 3 Groundwater Elevation Map
- Figure 4 Groundwater Analytical Results
- Table 1 Groundwater Elevations
- Table 2Groundwater Quality Measurements
- Table 3Groundwater Analytical Results
- Appendix A Analytical Laboratory Reports





FIGURES

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Sources: Google Earth



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TABLES

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			TABLE 1							
		GROUN	DWATER ELEV	ATIONS						
		- Hile	corp Energy Compa	+ iny						
		San J	uan County, New M	exico						
Well Identification	Top of Casing Elevation (1)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Adjusted Groundwater Elevation (2)				
		5/25/1999		NM		NM				
		9/1/1999		47.02		52.98				
		1/18/2000		44.05		55.95				
		5/17/2000		46.90		53.10				
		9/8/2000		46.91		53.09				
		12/20/2000		46.88		53.12				
		3/27/2001		NM 47.05		NM 52.05				
		9/17/2001		47.05		52.95				
		12/19/2001		46.97		53.03				
		3/25/2002		46.99		53.01				
		6/25/2002		47.01		52.99				
		9/24/2002		46.98		53.02				
		12/30/2002		47.40		52.60				
		3/27/2003		NM		NM				
		10/10/2003		NM		NM				
		12/10/2003		NM		NM				
		3/16/2004		47.28		52.72				
		6/22/2004		47.06		52.94				
		9/30/2004		47.24		52.76				
		12/13/2004		47.14		52.86				
		3/23/2005		46.91		53.09				
		10/28/2005		46.87		53.13				
		12/14/2005		46.72		53.28				
						3/20/2006		46.75		53.25
MW-1	100	6/21/2006		46.84		53.16				
		10/20/2006		46.89		53.11				
		12/13/2006		46.92		53.08				
		1/15/2008		NM		NM				
		4/30/2008		46.45		53.55				
		7/23/2008		46.63		53.37				
		10/24/2008		46.60		53.40				
		1/29/2009		46.57		53.43				
		4/23/2009		46.40		53.60				
		9/25/2009		46.52		53.48 53.40				
		9/28/2011		46.65		53.35				
		9/26/2012		46.80		53.20				
		9/17/2013		46.88		53.12				
		9/23/2014		46.94		53.06				
		12/17/2014		46.94		53.06				
		6/18/2015		46.92		53.08				
		9/22/2015		46.91		53.09				
		9/14/2016	46.70	46.71	0.01	53.30				
		9/27/2017		46.78		53.22				
		9/6/2018		46.79		53.21				
		8/12/2019	46.77	46.87	0.10	53.21				
		8/12/2020	46.81	47.00	0.19	53.15				
		9/21/2021	47.00	47.10	0.10	52.98				
		3/20/2023	46.92	46.96	0.04	53.07				
		8/3/2023	46.81	46.86	0.05	53.18				

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		GROUN		ATIONS		
		Hil San J	Johnston Federal #4 corp Energy Compa	4 any lexico		
Well Identification	Top of Casing Elevation (1)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Adjusted Groundwater Elevation (2)
		10/24/2008		42.85		54.86
		1/29/2009		42.83		54.88
		4/23/2009		42.75		54.96
		9/23/2009		42.02		54.69 54.70
		9/28/2011		43.14		54.57
		9/26/2012		43.33		54.38
		9/17/2013		43.51		54.20
		9/23/2014		43.56		54.15
		12/17/2014		43.59		54.12
MW-2	97.71	6/18/2015		43.57		54.14
		9/22/2015		43.58		54.13
		9/14/2016		43.51		54.20
		9/6/2018		43.50		54 21
		8/15/2019		43.56		54.15
		8/12/2020		43.62		54.09
		9/23/2021		43.80		53.91
		9/16/2022*	43.80	43.81	0.01	53.91
		3/20/2023		43.67		54.04
		8/3/2023		43.65		54.06
		10/24/2008		43.91		50.74
		1/29/2009		41.97		52.68
		4/23/2009		41.87		52.78
		9/25/2009		42.04		52.61
		9/22/2010		42.17		52.48
		9/26/2011		42.22		Adjusted Groundwater Elevation (2) 54.86 54.86 54.86 54.89 54.89 54.80 54.81 54.82 54.83 54.96 54.89 54.70 54.57 54.89 54.70 54.57 54.51 54.10 54.12 54.14 54.15 54.14 54.15 54.14 54.15 54.20 54.14 54.21 54.15 54.21 54.15 54.20 53.91 53.91 53.91 53.91 52.68 52.78 52.61 52.48 52.29 52.18 52.00 52.18 52.10 51.95 52.02
		9/17/2013		42.47		52.18
		9/23/2014		42.70		51.95
		12/17/2014		42.62		52.03
MW-3	94.65	6/18/2015		43.67		50.98
		9/22/2015		42.65		52.00
		9/14/2016		42.47		52.18
		9/27/2017		42.54		52.11
		8/12/2018		42.40 42.40		52.20
		8/12/2020		42.53		52.12
		9/23/2021		42.70		51.95
		9/16/2022		42.63		52.02
		3/20/2023		42.40		52.25
		8/3/2023		42.55		52.10
		10/24/2008		43.11		51.68
		1/29/2009		43.11		51.68
		4/23/2009		43.06		51.73
		9/25/2009		43.20		51.59
		9/22/2010		43.39		51.40
		9/28/2011		43.45		51.34
MW-4	94.79	9/17/2012		43.65		51.22
		9/23/2014		44.81		49.98
		12/17/2014		44.80		49.99
		6/18/2015		45.85		48.94
		9/22/2015		44.73		50.06
		9/14/2016		44.16		50.63
		9/27/2017		44.15		50.64

TABLE 1 GROUNDWATER ELEVATIONS Johnston Federal #4 Hilcorp Energy Company San Juan County, New Mexico									
Well Identification	Top of Casing Elevation (1)DateDepth to Product (feet BTOC)Depth to Groundwater 								
		9/6/2018		44.00		50.79			
		8/16/2019		44.27		50.52			
		8/13/2020		44.36		50.43			
MW-4	94.79	9/23/2021		44.30		50.49			
	9/16/2022 Not Measured - Well Damaged								
		3/20/2023		44.35		50.44			
		8/3/2023		44.24		50.55			

Notes:

(1): surface elevation based on an arbitrary datum of 100 feet based on top of casing of MW-1

*: anomalous data based on historical results

bgs - below ground surface

BTOC: below top of casing

NM = Not measured

--: indicates no GWEL or PSH measured

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

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TABLE 2 GROUNDWATER QUALITY MEASUREMENTS Johnston Federal #4 Hilcorp Energy Company San Juan County, New Mexico											
Well Identification	Date	Temperature (°C)	рН	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)				
	9/23/2014		No pa	arameters collec	ted due to PSH s	heen					
	9//22/2015		No pa	arameters collec	ted due to PSH s	heen					
	9/14/2016		No para	meters collected	I due to presence	of PSH					
	9/27/2017	14.06	6.55		1,662						
	9/6/2018	16.45	7.32		1,797	0.80	-349.5				
MW-1	8/12/2019	20.00	7.40	0.99		4.80	-11.3				
	8/12/2020	24.90	7.01	1.02	2,160	0.13	-18.9				
	9/21/2021		No para	meters collected	I due to presence	of PSH					
	9/16/2022	18.00	6.56	0.83	1,660						
	8/3/2023		No para	meters collected	I due to presence	of PSH					
	9/23/2014	15.00	7.22	1.50	2,310	11.30	57.0				
	9/22/2015	13.55	6.64	1.48	2,273	5.05	93.0				
	9/14/2016	13.53	7.26	1.53	2,368	5.10	6.9				
	9/27/2016	12.52	7.13		1,884						
	9/6/2018										
MW-2	8/15/2019	19.80	7.35	1.05			-45.8				
-	8/12/2020	18.90	6.45	1.02	2,060	2.72	-24.2				
	9/23/2021	17.40	7.24		5,320						
	9/21/2022*										
	8/3/2023										
	9/23/2014	15.70	7.01	1.20	1.820	10.13	-104.0				
	12/17/2014	14.78	7.49	1.44	2,218	2.39	-164.0				
	9/22/2015	15.07	7.32	1.31	2,021	2.34	-79.2				
	9/14/2016	14.91	7.21	1.21	1,856	2.01	-158.8				
	9/27/2017	13.91	6.79		1,534						
MW-3	9/6/2018	17.17	7.36		1,637	1.15	-68.7				
	8/12/2019	20.10	7.24	0.38			7.2				
	8/12/2020	22.20	6.47	0.50	1,020	1.66	2.6				
	9/23/2021	19.20	7.06		2,870						
	9/16/2022	18.70	6.62	0.44	890						
	8/3/2023	32.47	7.43	1.03	1,585	2.38	-30.5				
	9/23/2014	16.40	6.65	1.40	2.130	10.81	-124.0				
	12/17/2014	14.98	7.37	1.51	2,323	2.94	-166.6				
	6/18/2015	15.37	6.73	1.42	2,184	2.05	-140.1				
	9/22/2015	15.13	6.82	1.33	2,041	2.04	-126.5				
	9/14/2016	14.92	7.23	1.36	2,096	7.69	-205.4				
	9/27/2017	14.01	6.95		1,671						
MW-4	9/6/2018										
	8/16/2019	18.10	7.21	0.90			-22.5				
	8/13/2020	20.80	6.72	0.89	1,770	1.66	2.6				
	9/23/2021	18.80	7.15		4,270						
	9/16/2022		No	parameters colle	ected - well dama	ged	-				
	8/3/2023	36.14	7.36	1.27	1,957	2.38	-68.9				

Notes:

°C: degrees Celcius

DO: dissolved oxygen

g/L: grams per liter

uS/cm: microsiemens per centimeter

mg/L: milligrams per liter

mV: millivolts

ORP: oxidation-reduction potential

PSH: phase separated hydrocarbons

TDS: total dissolved solids

--: data not collected

*: PSH present during sampling, anomalous data based on historical results

			TAB	LE 3			
		GROU	NDWATER AN	IALYTICAL RE	SULTS		
			Johnston	Federal #4			
			Hilcorp Ener	rgy Company			
	1		San Juan Cour	nty, New Mexico		1	
Well Identification	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Manganese (dissolved) (mg/L)
1	MWQCC Standard	s	0.005	1.00	0.70	0.62	0.20
	5/25/1999	(orig)	8.7	2.9	2.8	2.9	
	12/1/1999	(orig)	4.7	1.3	0.9	10	
	1/18/2000	(orig)	3.6	0.82	0.84	7.5	
	5/17/2000	(orig)	6.9	1.1	1.5	17	
	9/8/2000	(orig)	4.6	0.62	0.93	10	
	12/20/2000	(orig)	< 0.0002	0.0005	0.034	0.061	
	3/27/2001	(orig)	5.43	0.641	0.991	9.83	
	6/27/2001	(orig)	5.87	0.9	0.99	10.4	
	9/17/2001	(orig)	5.91	0.75	0.98	10.7	
	12/19/2001	(orig)	7.2	0.65	1.02	11.3	
	3/25/2002	(orig)	5.52	0.83	1.19	10.5	
	6/26/2002	(orig)	0.516	0.0662	0.0787	0.863	
	9/24/2002	(orig)	5.31	8	0.88	13.96	
	12/30/2002	(orig)	7.66	10.2	0.76	14.14	
	6/22/2004	(orig)	6.16	8.1	0.47	15.84	
	3/20/2006	(orig)	3.17	3.74	1.06	30.13	
	6/21/2006	(orig)	4.9	3.28	0.448	2.39	
	12/13/2006	(orig)	5.3	7.2	0.87	15.45	
	3/27/2007	(orig)	6.87	5.72	0.21 12.16		
	6/25/2007	(orig)	5.68	1.83	0.4	9.48	
	4/30/2008	(orig)	6.3	1.8	0.28	8.6	
	7/23/2008	(orig)	7.1	2.2	0.45	10.6	
	10/24/2008	(orig)	6	2.1	0.4	9.0	
	1/29/2009	(orig)	6.7	2.2	0.63	14.5	
	9/25/2009	(orig)	3.9	1.5	0.68	9.8	1.11
MW-1	9/22/2010	(orig)	3.5	0.98	0.63	7.5	0.752
	9/28/2011	(orig)	3.36	1.05	0.667	6.81	0.774
	9/28/2011	(Duplicate)	3.43	1.12	0.779	8.29	
	9/26/2012	(orig)	3.07	0.599	0.577	5.16	0.67
			Augus	st 2013 Mobile Dua	I Phase Extraction	Event	
	9/17/2013	(orig)	4.69	7.55	1.17	9.0	0.89
	9/17/2013	(Duplicate)	4.7	7.21	1.04	9.97	
	9/23/2014	(orig)	2.97	4.25	0.778	6.89	0.85
	9/23/2014	(Duplicate)	2.82	3.88	0.754	6.69	
			Novem	ber 2014 Mobile Du	al Phase Extractio	on Event	
	1/8/2015	(orig)	4.35	6.15	1.07	10.0	
	6/18/2015	(orig)	4.05	6.26	1.04	10.8	
	6/18/2015	(Duplicate)	4.34	6.46	0.933	11.1	
		,	Apri	2015 Mobile Dual	Phase Extraction	Event	
	9/22/2015	(orig)	3.36	4.57	0.741	8.62	0.72
	9/22/2015	(Duplicate)	3.37	4.28	0.724	7.98	
	9/14/2016	/		Not sampled due t	o presense of PSH	1	
	9/27/2017	(orig)	2.34	2.86	0.949	9.5	0.739
		,	Novem	ber 2017 Mobile Du	al Phase Extraction	on Event	
	9/6/2018	(orig)	2.86	2.65	0.747	7.59	0.802
	8/12/2019	(orig)	2.19	1.61	0.944	7.0	0.395
	8/12/2020	(orig)	2.13	1.25	0.815	5.9	0.297
	9/21/2021	,		Not sampled due t	o presense of PSH	1	
	9/16/2022	(orig)	1.8	0.66	0.52	5.1	0.71
	8/3/2023	,		Not sampled due t	o presense of PSF	1	
						-	

		GROU	TAB NDWATER AN Johnston Hilcorp Ener	LE 3 ALYTICAL R Federal #4 rgy Company	ESULTS		
Well Identification	Sample Date	Sample Type	San Juan Cour Benzene (mg/L)	ty, New Mexico Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Manganese (dissolved) (mg/L)
4	MWQCC Standard	ls	0.005	1.00	0.70	0.62	0.20
	10/24/2008	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
	1/29/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
	9/25/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.002	0.04
	9/22/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	0.0074
	9/28/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0956
	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
	9/17/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
	9/23/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
MW-2	9/22/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
	9/14/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
	9/27/2017	(oria)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
	9/6/2018	(oria)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.005
	8/15/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0344
	8/12/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.010
	9/23/2021	(orig)	< 0.001	< 0.001	< 0.001	< 0.002	0.0057
	9/16/2022*	(019)	< 0.00 T	< 0.001		< 0.002	
	8/3/2023						
	0/0/2020						
	10/24/2008	(orig)	0.02	< 0.0005	< 0.0005	0.024	
	1/29/2009	(orig)	0.012	< 0.0005	< 0.0005	0.005	
-	9/25/2009	(orig)	0.0021	< 0.001	< 0.001	< 0.002	1.24
	9/22/2010	(orig)	0.0042	< 0.001	< 0.001	< 0.001	1.11
	9/28/2011	(orig)	0.0038	< 0.001	< 0.001	< 0.003	0.704
	9/26/2012	(orig)	0.0016	< 0.001	< 0.001	< 0.003	0.67
	9/17/2013	(orig)	0.0012	< 0.001	< 0.001	< 0.003	0.67
	9/23/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.65
N 114 O	12/17/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	
IVIVV-3	9/22/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.79
	09/14/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.48
	9/27/2017	(orig)	0.0031	< 0.001	< 0.001	< 0.003	0.471
	9/6/2018	(orig)	0.001	< 0.001	< 0.001	< 0.003	0.477
	8/12/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.496
	8/12/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.55
	9/23/2021	(orig)	< 0.001	< 0.001	< 0.001	< 0.002	0.47
	9/16/2022	(orig)	< 0.001	< 0.001	< 0.001	< 0.0015	0.57
	8/3/2023	(orig)					0.67
	10/24/2008	(orig)	0.024	< 0.0005	200.0	0.01	
	1/20/2000	(orig)	0.11	0.000	0.000	0.01	
	9/25/2009	(orig)	0.0088	< 0.000	0.009	0.147	1.24
	9/22/2010	(orig)	0.0000	0.001	0.0007	0.002	1.24
	9/22/2010	(orig)	0.019	0.005	0.0009	0.0057	1.27
	9/28/2011	(orig)	0.0256	0.0078	0.0017	0.0106	1.82
	9/20/2012	(Ung)	0.0124	0.0023	< 0.001	< 0.003	1.0
MW-4	9/20/2012	(Duplicate)	0.013	0.0022		0.0031	
		(a	Augus		a Flase Extraction		4.0
	9/17/2013	(orig)	0.0065	< 0.001	< 0.001	< 0.003	1.6
	9/23/2014	(orig)	0.0068	< 0.001	0.0011	< 0.003	2.2
			Novem	ber 2014 Mobile D	Juai Phase Extractio	on Event	
	12/17/2014	(orig)	0.003	< 0.001	< 0.001	< 0.003	
	12/17/2014	(Duplicate)	0.0039	< 0.001	< 0.001	< 0.003	
			Apri	2015 Mobile Dua	I Phase Extraction	Event	

	TABLE 3 GROUNDWATER ANALYTICAL RESULTS Johnston Federal #4 Hilcorp Energy Company San Juan County, New Mexico										
Well Identification	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Manganese (dissolved) (mg/L)				
NMWQCC Standards 0.005 1.00 0.70 0.62 0.20											
	6/18/2015	(orig)	0.0039	< 0.001	< 0.001	< 0.003					
	9/22/2015	(orig)	0.0018	< 0.001	< 0.001	< 0.003	1.9				
	9/14/2016	(orig)	0.0047	< 0.001	< 0.001	< 0.003	2.0				
	9/27/2017	(orig)	0.0266	< 0.001	< 0.001	0.004	2.46				
			Novem	ber 2017 Mobile D	ual Phase Extraction	on Event					
MW-4	9/6/2018	(orig)	0.132	<0.001	<0.001	0.0165	1.74				
	8/16/2019	(orig)	0.0087	< 0.001	< 0.001	< 0.003	1.57				
	8/13/2020	(orig)	0.0184	< 0.001	< 0.001	< 0.003	1.65				
	9/23/2021	(orig)	0.027	< 0.001	< 0.001	0.0053	1.9				
	9/16/2022			Not Sampled	- Well Damaged						
	8/3/2023	(orig)	0.0085	< 0.002	< 0.002	0.0095	1.8				

Notes:

mg/L: milligrams per liter

NMWQCC: New Mexico Water Quality Control Commission

PSH: phase separated hydrocarbons

*: PSH present during sampling, anomalous data based on historical results

--: not analyzed

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

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



APPENDIX A

Laboratory Analytical Reports

Released to Imaging: 5/31/2024 9:57:24 AM



August 11, 2023

Mitch Killough HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Johnston Fed 4

OrderNo.: 2308300

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/4/2023 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analy	sis Laboratory, Inc.			An Lal Da	alytical Report o Order 2308300 te Reported: 8/11/2023
CLIENT: HILCORP ENERGY		Client Sa	mple ID	: MW-3	3
Project: Johnston Fed 4		Collect	ion Date	: 8/3/20	23 11:10:00 AM
Lab ID: 2308300-001	Matrix: AQUEOUS	Receiv	ved Date	: 8/4/20	23 6:50:00 AM
Analyses	Result	RL Qua	Units	DF	Date Analyzed
EPA METHOD 200.7: DISSOLVED M	ETALS				Analyst: VP
Manganese	0.67	0.0020 *	mg/L	1	8/9/2023 9:04:21 AM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D Н

- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- в Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 1 of 5

Analytical Report Lab Order 2308300

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/11/2023 **CLIENT: HILCORP ENERGY Client Sample ID: MW-4 Project:** Johnston Fed 4 Collection Date: 8/3/2023 11:50:00 AM Lab ID: 2308300-002 Matrix: AQUEOUS Received Date: 8/4/2023 6:50:00 AM Analyses Recult **PI** Qual Unite DE Data Analyzad

Analyses	Result	KL Qua	Units	Dr	Date Analyzed
EPA METHOD 200.7: DISSOLVED METALS					Analyst: VP
Manganese	1.8	0.010 *	mg/L	5	8/9/2023 9:11:10 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	8.5	2.0	µg/L	2	8/5/2023 6:09:25 AM
Toluene	ND	2.0	µg/L	2	8/5/2023 6:09:25 AM
Ethylbenzene	ND	2.0	µg/L	2	8/5/2023 6:09:25 AM
Xylenes, Total	9.5	3.0	µg/L	2	8/5/2023 6:09:25 AM
Surr: 1,2-Dichloroethane-d4	94.4	70-130	%Rec	2	8/5/2023 6:09:25 AM
Surr: 4-Bromofluorobenzene	120	70-130	%Rec	2	8/5/2023 6:09:25 AM
Surr: Dibromofluoromethane	97.7	70-130	%Rec	2	8/5/2023 6:09:25 AM
Surr: Toluene-d8	98.1	70-130	%Rec	2	8/5/2023 6:09:25 AM

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

Qualifiers:

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit PQL
- Practical Quanitative Limit % Recovery outside of standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 2 of 5

*

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:		HILCORP ENERG	θY								
Project:		Johnston Fed 4									
Sample ID:	MB-A	Samp	Type:	MBLK	Tes	TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Bato	h ID:	A98825	F	RunNo:	98825				
Prep Date:		Analysis	Date:	8/9/2023	S	SeqNo: :	3600606	Units: mg/L			
Analyte		Result	PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese		ND	0.002	20							
Sample ID:	LCSLL-	A Samp	Туре:	LCSLL	Tes	tCode: E	EPA Method	200.7: Dissolv	ed Metals	i	
Client ID:	BatchQ	c Bate	h ID:	A98825	F	RunNo:	98825				
Prep Date:		Analysis	Date:	8/9/2023	S	SeqNo: :	3600607	Units: mg/L			
Analyte		Result	PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese		0.0021	0.002	20 0.002000	0	107	50	150			
Sample ID:	LCS-A	Samp	Туре:	LCS	Tes	tCode: E	EPA Method	200.7: Dissolv	ed Metals	i	
Client ID:	LCSW	Bato	h ID:	A98825	F	RunNo:	98825				
Prep Date:		Analysis	Date:	8/9/2023	S	SeqNo: :	3600608	Units: mg/L			
Analyte		Result	PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese		0.51	0.002	20 0.5000	0	101	85	115			

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 Quanitative 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

2308300

11-Aug-23

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: HILC Project: Johns	CORP ENERG ston Fed 4	Y								
Sample ID: 100ng lcs2	Samp	Гуре: LC	S	Tes	stCode: El	PA Method	8260B: Volati	les Short	List	
Client ID: LCSW	Batc	h ID: SL	98757	F	RunNo: 98757					
Prep Date:	Analysis [Date: 8/	4/2023	:	SeqNo: 3	597255	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130			
Toluene	20	1.0	20.00	0	99.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			
Sample ID: mb2	Samp	Гуре: МЕ	BLK	Tes	stCode: El	PA Method	8260B: Volati	les Short	List	
Client ID: PBW	Batc	h ID: SL	98757	F	RunNo: 9	8757				
Prep Date:	Analysis [Date: 8/	4/2023	:	SeqNo: 3	597257	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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromotiuorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromotiuorometnane	10		10.00		102	70	130			
	10		10.00		99.0	70	130			
Sample ID: 100ng Ics	Samp	Гуре: LC	S	Tes	stCode: El	PA Method	8260B: Volati	les Short	List	
Client ID: LCSW	Batc	h ID: SL	98757	F	RunNo: 9	8757				
Prep Date:	Analysis [Date: 8/4	4/2023	:	SeqNo: 3	597278	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.4	70	130			
Toluene	20	1.0	20.00	0	97.9	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromotiuorobenzene	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	10		10.00		102	70 70	130			
Sampla ID: mb	Como			Too			ODEND: Valat		liot	
Client ID: PRW	Samp	h ID·SI	98757	res	RunNo: a	-A WETOO	ozoud: voiati	ies Snort	LIST	
Prep Date:	Analysis [Date: 8/	4/2023	:	SeqNo: 3	597279	Units: µa/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0			~		J /			
Toluene	ND	1.0								

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 Quanitative 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

WO#: **2308300**

11-Aug-23

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: H	HILCORP ENERG	GΥ								
Project: J	ohnston Fed 4									
Sample ID: mb	Samp	туре: МЕ	BLK	Tes	tCode: EF	PA Method	8260B: Volatil	es Short I	List	
Client ID: PBW	Bate	ch ID: SL	98757	F	RunNo: 98	3757				
Prep Date:	Analysis	Date: 8/4	4/2023	S	SeqNo: 35	597279	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-	-d4 9.8		10.00		98.3	70	130			
Surr: 4-Bromofluorobenzo	ene 10		10.00		101	70	130			
Surr: Dibromofluorometh	ane 10		10.00		102	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	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 Quanitative 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

WO#: 2308300 11-Aug-23

HALL Hall Environ ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-34 Website: v		iental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 -3975 FAX: 505-345-4107 ww.hallenvironmental.com		Sample Log-In Check List	
Client Name: Hilcorp Energy	Work Order Number:	2308300		RcptNo: 1	
Received By: Tracy Casarrubias	8/4/2023 6:50:00 AM				
Completed By: Tracy Casarrubias	8/4/2023 9:23:36 AM				
Reviewed By: 9-4-23					
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗹	No 🛄	Not Present	
2. How was the sample delivered?		Courier			
Log In 3. Was an attempt made to each the sample	202	Voc. 🗹	No 🗌		
5. Was an altempt made to coor the sample	£5 (res 💌			
4. Were all samples received at a temperate	ure of >0° C to 6.0°C	Yes 🔽	No 🗌		
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
6. Sufficient sample volume for indicated tes	st(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) properly preserved?		Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗹	No 🗌	NA 🗌 HNO3	
9. Received at least 1 vial with headspace <	1/4" for AQ VOA?	Yes 🗹	No 🗌		
10. Were any sample containers received br	oken?	Yes 🗌	No 🔽	# of preserved bottles checked	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗌	for pH:	
12. Are matrices correctly identified on Chain of Custody?		Yes 🗹	No 🗌	Adjusted? yes	
13. Is it clear what analyses were requested?)	Yes 🗹	No 🗌	and a child ?	
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗋	Checked by: MAY 19/2 5	
Special Handling (if applicable)					
15. Was client notified of all discrepancies w	vith this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:	_			
By Whom:	Via: [eMail	_ Phone _ Fax	In Person	
Regarding:					
16. Additional remarks:					
Poured off ~125mL from original u 002B, Proceeded to add ~ 40mL o	Inpreserved volume provided f HNO3 (Chem#7115) for pro	and filtere	(Lot# FL096)	X_4) to create samples 001A and	
17. <u>Cooler Information</u> Cooler No Temp °C Condition	Seal Intact Seal No. S	Seal Date	Signed By		
1 3.1 Good	Yes Yogi		oignou by		

Page 1 of 1

Received by OCD: 3/29/2024 8:47:17 AM

Released to Imaging: 5/31/2024 9:57:24 AM

Received by OCD: 3/29/2024 8:47:17 AM	£.		Page 26 of 27
Chain-of-Custody Record	Turn-Around Time:		
Client: Hilcorp Farmington NM	X Standard	sh	ANALYSIS LABORATORY
	Project Name:		www.hallenvironmental.com
Mailing Address: 382 Road 3100 Aztec, NM 87410	Johnston	Fed 4	4901 Hawkins NE - Albuquerque, NM 87109
Billing Address: PO Box 61529 Houston, TX 77208	Project #:		Tel. 505-345-3975 Fax 505-345-4107
Phone #: 505-486-9543			Analysis Request
email or Fax#: Brandon.Sinclair@hilcorp.com	Project Manager:		
QA/QC Package:			
Standard Level 4 (Full Validation)	Mitch Killo	yen.	
Accreditation:	Sampler: Brandon S	Sinclair	
D NELAC D Other	On Ice: W Yes	L NO YOOY	
	# of Coolers:	212	
	Cooler Lemp(including CF): S. I-	0:510	093
Compo	Container Type Preservati	iv HEAL No.	
Date lime Matrix Salliple Nallie		0000000	
Whater MML-1	(3) 40ml VOA (1) HCI 500ml Plastic 000l		
Q_2 110 MW-3	(1) 500ml Plastic Cool	100	
	(3) 40ml VOA HCI		
8-5 [150 Water	(1) 500mi Plastic Cool	200	
		- P 73	
	-		
Date: Time: Relinquished by:	Received by: Via:	$f = \frac{\text{Date Time}}{8/3/23}$ /S58	Remarks: *Dissolved Mn is to be filterd and preserved in the lab. Special pricing see Andy.
Date: Time: Relinquished by:	Received by: Via: Court	Date Time Co.Sc.	
Released to Imaging: 5/31/2024 9:5/:24 AM	tal may be subcontracted to other accredited labor	atories. This serves as notice of th	is possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 328035

CONDITIONS Operator: OGRID: HILCORP ENERGY COMPANY 372171 1111 Travis Street Action Number: Houston, TX 77002 328035 Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for Johnston Federal #4: Content Satisfactory 1. Continue to annually sample to assess BTEX concentrations in MW-1 and MW-4, and dissolved Mn concentration in MW-1, MW-3 and MW-4. 2. Report findings and recommendations to NMOCD after assessment has been complete. 3. Upload the 2024 Annual Groundwater Monitoring Report by April 1, 2025.	5/31/2024