

REVIEWED

By Mike Buchanan at 3:48 pm, May 13, 2024



ENSOLUM

March 19, 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

Florance M #047X
San Juan County, New Mexico
Harvest Four Corners, LLC
NMOCD Incident No: nAUTOfAB000185
Remediation Permit Number: 3RP-317-0

To Whom it May Concern:

Review of the 2023 Annual Groundwater Monitoring Report for Florance M#047X, Harvest Four Corners, LLC: Content Satisfactory

1. Continue monthly site visits for manual removal of PSH and assessing other options for LNAPL removal.
2. Continue to conduct groundwater monitoring for BTEX as scheduled annually
3. Submit the 2024 annual groundwater monitoring report by April 1, 2025.

Ensolum, LLC (Ensolum), on behalf of Harvest Four Corners, LLC (Harvest), has prepared this report detailing annual groundwater monitoring activities completed between January and December 2023 at the Florance M #047X (Site), Remediation Permit (RP) Number 3RP-317-0 and Incident Number nAUTOfAB000185. The purpose of this project was to continue phase-separated hydrocarbon (PSH) recovery and monitoring of petroleum hydrocarbon impacts to groundwater resulting from a release involving a former earthen dehydrator pit.

LOCATION

The Site is located at latitude 36.8436° and longitude -107.8010° in Unit G, Section 5, Township 30 North, Range 9 West (Figure 1). The Site is located in Crow Canyon, a tributary to Pump Canyon, in the San Juan Basin in San Juan County, New Mexico.

SITE HISTORY

Groundwater at the Site is impacted by petroleum hydrocarbons due to a release from a former earthen dehydrator pit. In June 1996, source material was excavated to approximately 19 feet below ground surface (bgs). A subsequent borehole drilled in the excavation to approximately 115 feet bgs identified groundwater at approximately 97 feet bgs. Laboratory analytical results of groundwater collected from the borehole identified concentrations of dissolved benzene, toluene, ethylbenzene, and total xylenes (BTEX) exceeding New Mexico Water Quality Control Commission (NMWQCC) standards. As a result, five groundwater monitoring wells (MW-1 through MW-5) were installed.

Since installation of the five monitoring wells, groundwater elevations and groundwater quality have been monitored at the Site, with monitoring wells MW-2, MW-3, and MW-5 containing PSH during at least one sampling event. Historical records documenting monitoring activities and results can be found in previous annual reports submitted to the New Mexico Oil Conservation Division (NMOCD).

In October 2019, Harvest conducted drilling activities, which included the installation of two new monitoring wells, MW-6 and MW-7, located downgradient of monitoring wells MW-3 and MW-5,

for use as point of compliance (POC) monitoring wells. On December 17, 2019, United Field Services in Farmington, New Mexico was contracted to survey top-of-casing elevations to accurately determine groundwater elevations in feet above mean sea level (AMSL).

SITE GROUNDWATER CLEANUP STANDARDS

The NMOCD requires groundwater-quality standards be met as presented by the 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 ($\mu\text{g/L}$):

- Benzene: 5 $\mu\text{g/L}$
- Toluene: 1,000 $\mu\text{g/L}$
- Ethylbenzene: 700 $\mu\text{g/L}$
- Total Xylenes: 620 $\mu\text{g/L}$

GROUNDWATER AND PSH ELEVATIONS

Groundwater levels were monitored quarterly by recording depth to groundwater and depth to PSH measurements in the existing monitoring wells with an oil/water interface probe. The interface probe was decontaminated with Alconox[®] soap and rinsed with distilled water prior to each measurement. Top-of-casing elevations from the survey were used to calculate groundwater potentiometric elevations, draft groundwater contours, and determine groundwater flow direction, which are presented on Figures 2 through 5.

GROUNDWATER SAMPLING

On June 13, 2023, monitoring wells MW-2, MW-5, MW-6, and MW-7 were purged using disposable polyethylene bailers. As groundwater was purged from each monitoring well, pH, electrical conductance (EC), and temperature, were recorded for determining stabilization conditions prior to sampling. Monitoring wells were purged until a total of three casing volumes were removed or the well was purged dry, indicating groundwater would be representative of aquifer conditions. Purged groundwater was containerized and disposed of at a nearby Harvest compressor station.

Groundwater samples were collected by filling three 40-milliliter (mL) glass vials from each well. The laboratory-supplied vials were filled and capped with zero headspace to prevent degradation of the sample. Samples were labeled with the date and time of collection, well designation, project name, sample collector's name, and parameters to be analyzed. They were immediately sealed, packed on ice, and submitted to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021. 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.

BTEX concentrations in monitoring wells MW-1 and MW-4 have been in compliance with NMWQCC standards for over eight consecutive sampling events and were not sampled in 2023. Monitoring well MW-3 was not sampled in 2023 due to the presence of PSH.

PSH RECOVERY

In November 2019, Harvest installed a solar powered pneumatic pumping recovery system in monitoring MW-3. The pump utilizes a hydrophobic and oleophilic skimmer that floats on the water column to remove PSH from the water PSH interface. The system cycles between vacuum and

pressure to move PSH to the surface, where it is containerized. A delay between pumping cycles allows for recharge of fluids in the monitoring well and prevents over-pumping to efficiently use the power generated from the solar panels. Bi-weekly to monthly Site visits were conducted in the first quarter of 2023 to monitor system performance, PSH recovery, and conduct system operations and maintenance (O&M).

The pneumatic pumping system was removed from the Site on April 13, 2023, due to a drop in PSH thickness in February and March 2023. A product recovery sock was placed in monitoring well MW-3 and monthly manual product bailing has been conducted since the removal of the pneumatic pumping system.

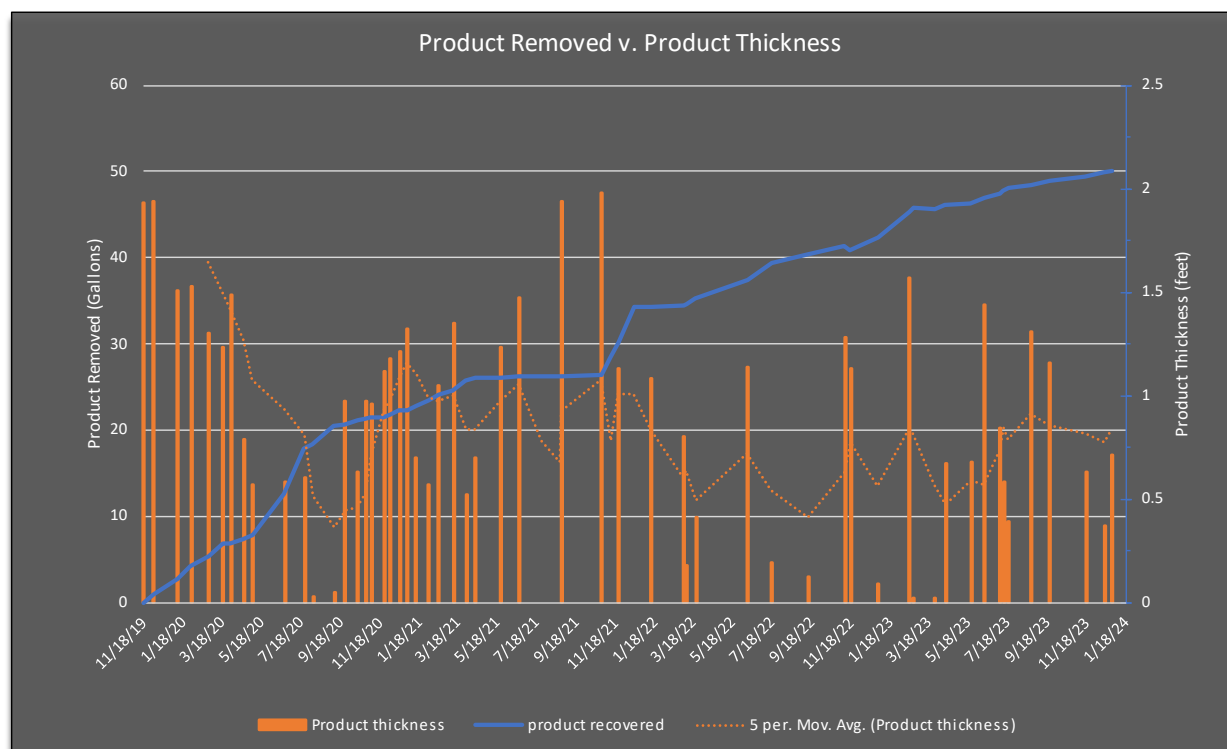
RESULTS

Depth to groundwater information and analytical results are provided in Tables 1 and 2, respectively. Groundwater sampling forms and analytical laboratory reports for the analyzed samples are included in Appendices A and B, respectively.

Depth to groundwater was collected in March 2023, June 2023, September 2023, and December 2023. Based on data collected during the four quarterly events, the interpreted groundwater-flow direction is to the southeast (contours shown on Figures 2 through 5). Contours were inferred based on groundwater elevations and physical characteristics at the Site (topography, proximity to irrigation ditches, etc.).

All wells on Site, except for MW-1, MW-3, and MW-4, were sampled on June 13, 2023. BTEX constituents in groundwater were detected in monitoring wells MW-2 and MW-5. Groundwater from wells MW-2 and MW-5 contained benzene concentrations of 46 µg/L and 5,300 µg/L, respectively, which exceeds the NMWQCC standards. Monitoring wells MW-6 and MW-7 did not contain detectable concentrations of BTEX compounds in groundwater and were compliant with the NMWQCC standards. BTEX results and approximate PSH plume extent are presented on Figure 3 and summarized in Table 2.

Approximately 50.0 gallons of PSH have been recovered from monitoring well MW-3 through pneumatic pumping, manual bailing, and product recovery socks between November 18, 2019, and December 27, 2023. A total of 7.6 gallons of PSH were recovered in 2023. At the time of the installation of the PSH recovery system in November 2019, the PSH thickness was 1.93 feet; in 2023, PSH ranged in thickness from 0.02 feet in February 2023 to 1.57 feet in January 2023. Operation data and system maintenance and manual product recovery are summarized in Table 3. Product thickness and estimated product recovery for monitoring well MW-3 is depicted on the chart below.



CONCLUSIONS

Impacted groundwater at the Site has been successfully delineated. BTEX concentrations in downgradient monitoring wells MW-6 and MW-7 are in compliance with NMWQCC standards. Additionally, groundwater data collected during this year, as well as historical groundwater data, indicate contaminant concentrations have declined over time with the exception of the increase in monitoring well MW-5 on June 13, 2023. Despite the decline in contaminant concentrations in most wells, PSH remains in well MW-3.

To address residual PSH at the Site, Harvest installed a pneumatic PSH pumping system in monitoring well MW-3 in November 2019. The pneumatic pumping system was removed on April 13, 2023, and manual product recovery has continued monthly. Approximately 50.0 gallons of PSH have been recovered from monitoring well MW-3 as of the last Site visit on December 27, 2023.

With the removal of the PSH recovery system, Ensolum recommends monthly site visits for manual PSH recovery. Ensolum also recommends the use of product recovery socks in monitoring well MW-3. In addition, Ensolum recommends groundwater monitoring through quarterly well gauging (depth-to-groundwater and depth-to-PSH measurements) and annual groundwater sampling for laboratory analysis of BTEX compounds.

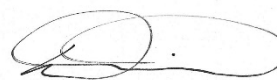
We appreciate the opportunity to provide this report to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,

Ensolum, LLC



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Project Geologist
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Attachments:

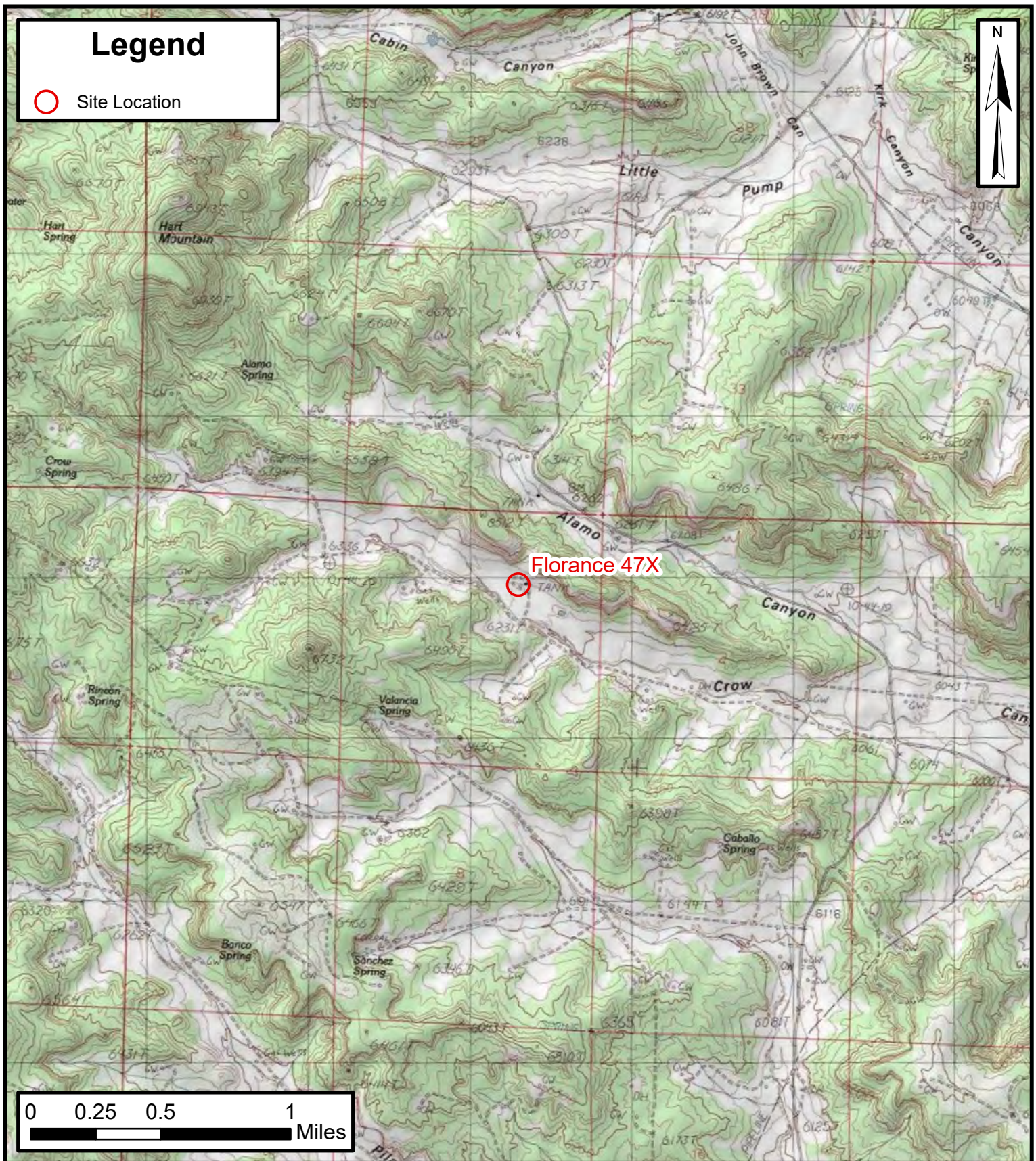
Figure 1: Site Location Map
Figure 2: Groundwater Elevation (March 2023)
Figure 3: Groundwater Analytical Results and Groundwater Elevation (June 2023)
Figure 4: Groundwater Elevation (September 2023)
Figure 5: Groundwater Elevation (December 2023)

Table 1: Groundwater Elevations
Table 2: Groundwater Analytical Results
Table 3: Pneumatic Product Recovery System Data

Appendix A: Groundwater Sampling Forms
Appendix B: Laboratory Analytical Reports



FIGURES



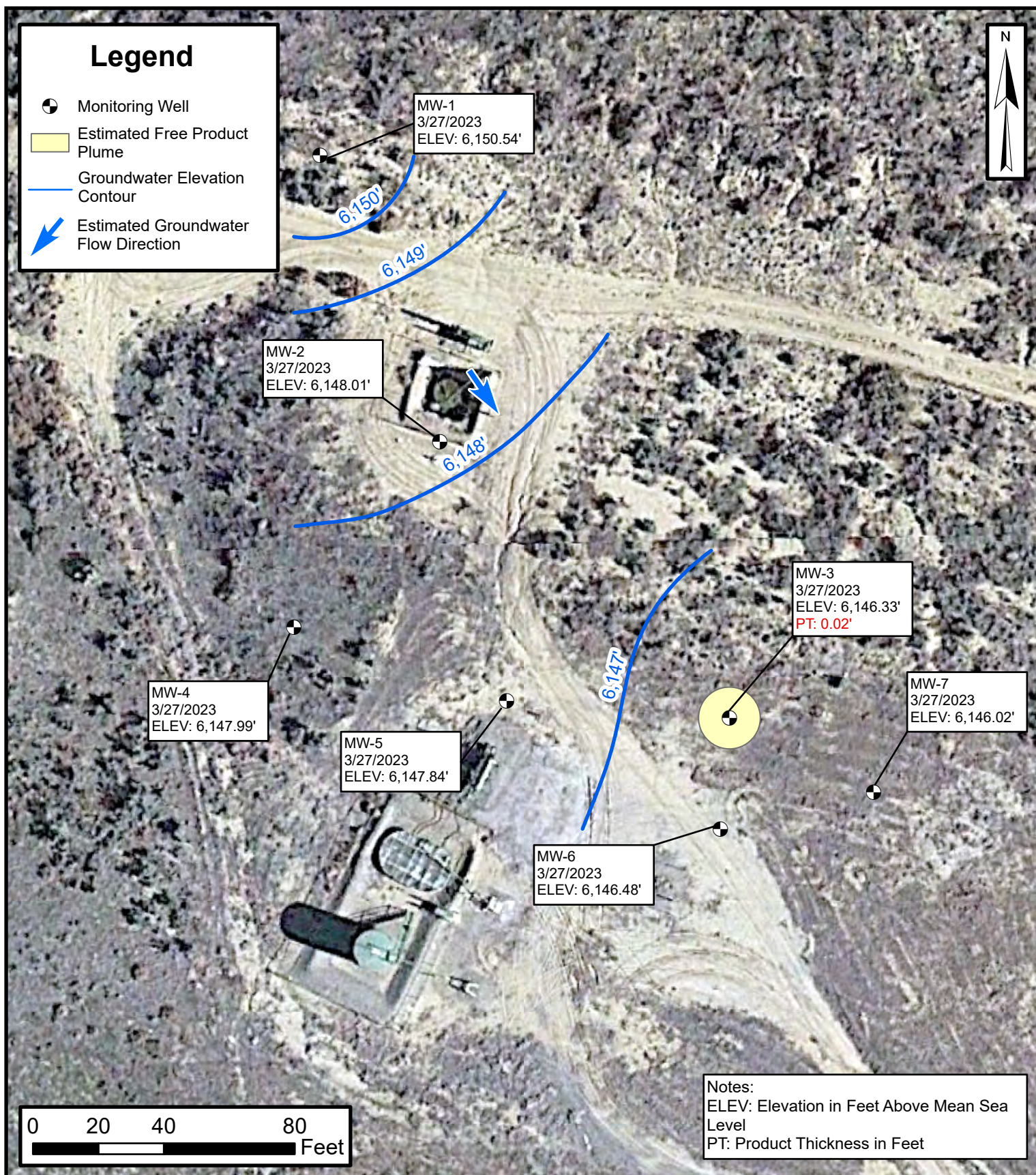
Site Location Map

Florance #047X
 Harvest Four Corners, LLC
 36.8436, -107.8010
 SW/NE, Sec 5, T30N, R9W
 San Juan County, New Mexico

FIGURE

1

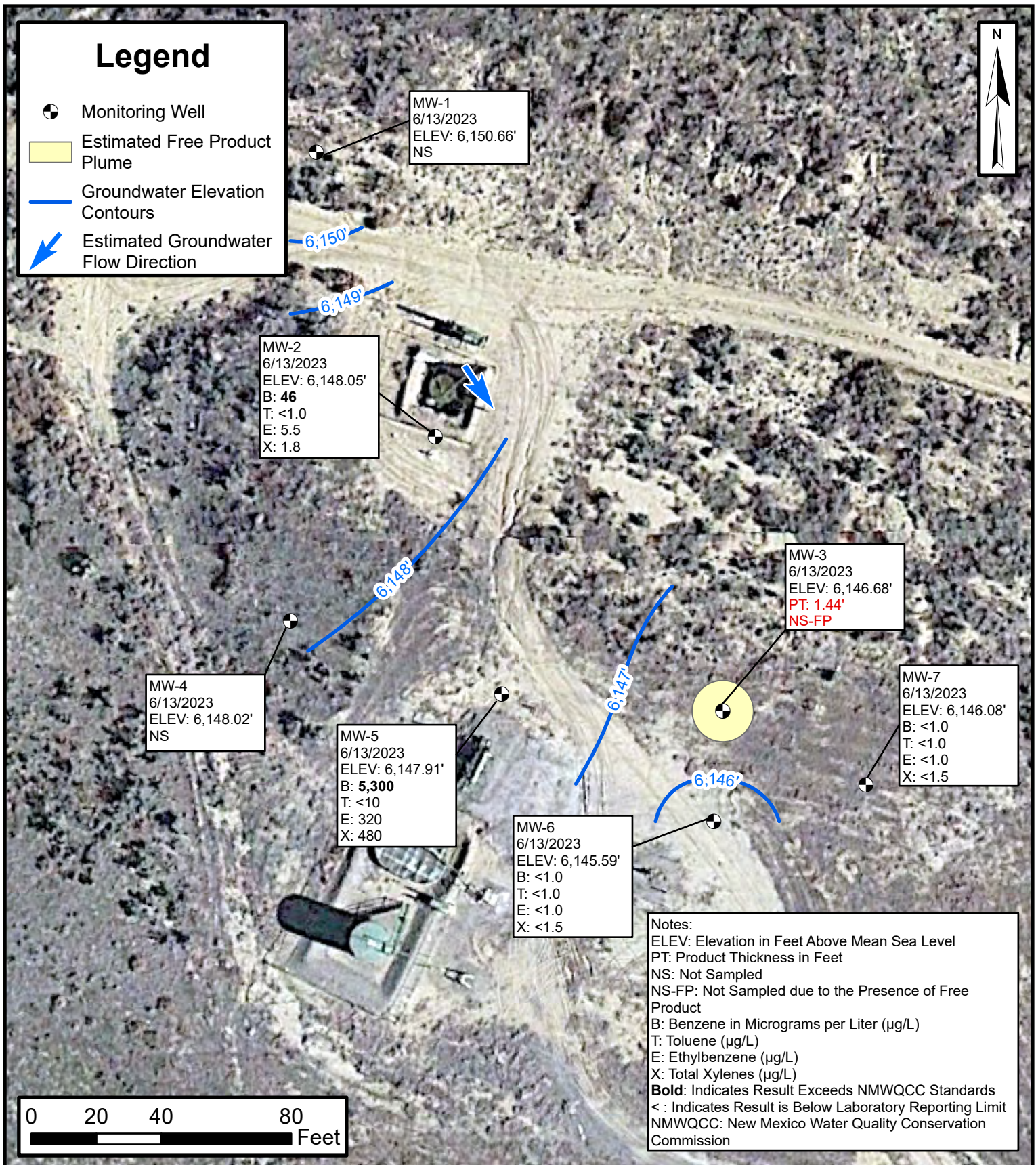




Groundwater Elevation (March 2023)

Florance #047X
 Harvest Four Corners, LLC
 36.8436, -107.8010
 SW/NE, Sec 5, T30N, R9W
 San Juan County, New Mexico

FIGURE
2



Groundwater Analytical Results and Groundwater Elevation (June 2023)

Florance #047X
Harvest Four Corners, LLC
36.8436, -107.8010
SW/NE, Sec 5, T30N, R9W
San Juan County, New Mexico

FIGURE
3

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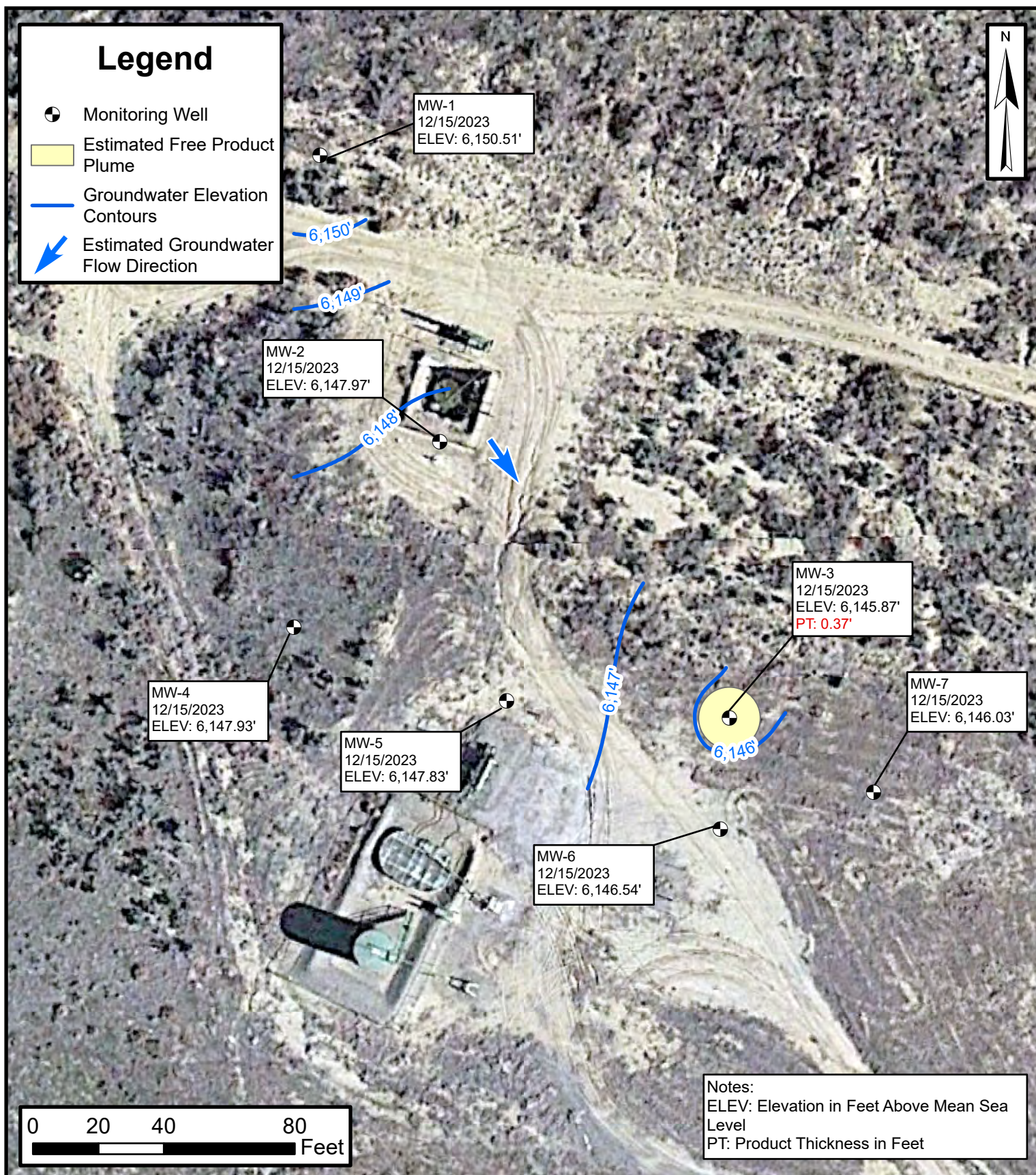


Groundwater Elevation (September 2023)

Florance #047X
 Harvest Four Corners, LLC
 36.8436, -107.8010
 SW/NE, Sec 5, T30N, R9W
 San Juan County, New Mexico

FIGURE
4

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Groundwater Elevation (December 2023)

Florance #047X
 Harvest Four Corners, LLC
 36.8436, -107.8010
 SW/NE, Sec 5, T30N, R9W
 San Juan County, New Mexico

FIGURE
5

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TABLES



TABLE 1
GROUNDWATER ELEVATIONS
 Florance M #047X
 Harvest Four Corners, LLC
 San Juan County, New Mexico

Well Identification	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-1	4/2/2012	6,229.61	UNK	UNK	UNK	UNK
	6/13/2012		UNK	UNK	UNK	UNK
	10/2/2012		UNK	UNK	UNK	UNK
	12/6/2012		UNK	UNK	UNK	UNK
	3/1/2013		99.52	NP	NP	6,130.09
	6/24/2013	6250.21*	99.41	NP	NP	6,150.80
	9/12/2013		98.90	NP	NP	6,151.31
	12/4/2013		98.79	NP	NP	6,151.42
	3/19/2014		99.08	NP	NP	6,151.13
	6/13/2014		99.02	NP	NP	6,151.19
	9/11/2014		99.01	NP	NP	6,151.20
	12/4/2014		99.18	NP	NP	6,151.03
	3/17/2015		99.14	NP	NP	6,151.07
	4/28/2016		99.17	NP	NP	6,151.04
	8/11/2016		99.28	NP	NP	6,150.93
	10/17/2016		99.20	NP	NP	6,151.01
	1/31/2017		99.24	NP	NP	6,150.97
	4/28/2017		99.24	NP	NP	6,150.97
	7/28/2017		99.31	NP	NP	6,150.90
	10/7/2019	6250.35**	99.54	NP	NP	6,150.81
	3/19/2020		99.52	NP	NP	6,150.83
	6/23/2020		99.57	NP	NP	6,150.78
	9/8/2020		99.31	NP	NP	6,151.04
	12/4/2020		99.59	NP	NP	6,150.76
	3/31/2021		99.81	NP	NP	6,150.54
	5/24/2021		99.61	NP	NP	6,150.74
	8/23/2021		100.09	NP	NP	6,150.26
	11/23/2021		100.02	NP	NP	6,150.33
	3/8/2022		99.74	NP	NP	6,150.61
	5/23/2022		NM	NM	NM	NM
	9/12/2022		100.12	NP	NP	6,150.23
	11/7/2022		99.65	NP	NP	6,150.70
	3/27/2023		99.81	NP	NP	6,150.54
	6/13/2023		99.69	NP	NP	6,150.66
	9/22/2023		99.71	NP	NP	6,150.64
	12/15/2023		99.84	NP	NP	6,150.51
MW-2	4/2/2012	6,226.30	UNK	UNK	UNK	UNK
	6/13/2012		UNK	UNK	UNK	UNK
	10/2/2012		UNK	UNK	UNK	UNK
	12/6/2012		UNK	UNK	UNK	UNK
	3/1/2013		98.47	NP	NP	6,127.83



TABLE 1
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Well Identification	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-2	6/24/2013	6247.15*	98.45	NP	NP	6,148.70
	9/12/2013		98.60	NP	NP	6,148.55
	12/4/2013		98.41	NP	NP	6,148.74
	3/19/2014		98.54	NP	NP	6,148.61
	6/13/2014		98.53	NP	NP	6,148.62
	9/11/2014		98.60	NP	NP	6,148.55
	12/4/2014		98.56	NP	NP	6,148.59
	3/17/2015		98.63	NP	NP	6,148.52
	4/28/2016		98.73	NP	NP	6,148.42
	8/11/2016		98.76	NP	NP	6,148.39
	10/17/2016		98.73	NP	NP	6,148.42
	1/31/2017		98.77	NP	NP	6,148.38
	4/28/2017		98.76	NP	NP	6,148.39
	7/28/2017		98.82	NP	NP	6,148.33
	10/7/2019	6247.28**	99.03	NP	NP	6,148.25
	3/19/2020		99.03	NP	NP	6,148.25
	6/23/2020		99.07	NP	NP	6,148.21
	9/8/2020		98.96	NP	NP	6,148.32
	12/4/2020		99.10	NP	NP	6,148.18
	3/31/2021		99.22	NP	NP	6,148.06
	5/24/2021		99.14	NP	NP	6,148.14
	8/23/2021		99.11	NP	NP	6,148.17
	11/23/2021		99.15	NP	NP	6,148.13
	3/8/2022		99.20	NP	NP	6,148.08
	5/23/2022		99.04	NP	NP	6,148.24
	9/12/2022		98.28	NP	NP	6,149.00
	11/7/2022		9.19	NP	NP	6,238.09
	3/27/2023		99.27	NP	NP	6,148.01
	6/13/2023		99.23	NP	NP	6,148.05
	9/22/2023		99.24	NP	NP	6,148.04
	12/15/2023		99.31	NP	NP	6,147.97
MW-3	4/2/2012	6,217.53	UNK	UNK	UNK	UNK
	6/13/2012		UNK	UNK	UNK	UNK
	10/2/2012		UNK	UNK	UNK	UNK
	12/6/2012		UNK	UNK	UNK	UNK
	3/1/2013		92.48	91.51	0.97	6,125.83
	6/24/2013	6238.51*	91.71	90.86	0.85	6,147.48
	9/12/2013		91.69	90.89	0.80	6,147.46
	12/4/2013		91.23	90.83	0.40	6,147.60
	3/19/2014		91.59	91.03	0.56	6,147.37
	6/13/2014		91.38	91.08	0.30	6,147.37
	9/11/2014		91.47	91.20	0.27	6,147.26



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Well Identification	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-3	12/4/2014	6238.51*	91.15	91.15	0.01	6,147.37
	3/17/2015		91.53	91.22	0.31	6,147.23
	4/28/2016		92.00	91.20	0.80	6,147.15
	8/11/2016		92.54	91.18	1.36	6,147.06
	10/17/2016		92.54	91.56	0.98	6,146.75
	1/31/2017		92.59	91.09	1.50	6,147.12
	4/28/2017		92.10	91.21	0.89	6,147.12
	7/28/2017		92.28	91.26	1.02	6,147.05
	10/7/2019	6238.66**	93.46	91.31	2.15	6,146.92
	3/19/2020		92.85	91.62	1.23	6,146.79
	6/23/2020		92.41	91.83	0.58	6,146.71
	9/8/2020		91.71	91.66	0.05	6,146.99
	12/4/2020		92.90	91.72	1.18	6,146.70
	3/31/2021		92.60	92.08	0.52	6,146.48
	5/24/2021		92.91	91.68	1.23	6,146.73
	8/23/2021		93.62	91.59	2.03	6,146.66
	11/23/2021		92.94	91.81	1.13	6,146.62
	3/8/2022		92.41	92.23	0.18	6,146.39
	5/23/2022		92.86	91.80	1.06	6,146.65
	9/12/2022		92.23	92.11	0.12	6,146.53
	11/7/2022		93.10	91.82	1.28	6,146.58
	12/4/2022		92.07	91.97	0.10	6,146.67
	3/27/2023		92.35	92.33	0.02	6,146.33
	6/13/2023		93.13	91.69	1.44	6,146.68
	2/15/2023		93.24	91.67	1.57	6,146.68
	7/12/2023		92.40	91.82	0.58	6,146.72
	8/24/2023		93.03	91.72	1.31	6,146.68
	9/22/2023		92.82	91.66	1.16	6,146.77
	12/15/2023		93.09	92.72	0.37	6,145.87
MW-4	4/2/2012	6,219.93	UNK	UNK	UNK	UNK
	6/13/2012		UNK	UNK	UNK	UNK
	10/2/2012		UNK	UNK	UNK	UNK
	12/6/2012		UNK	UNK	UNK	UNK
	3/1/2013		92.02	NP	NP	6,127.91
	6/24/2013	6240.67*	91.98	NP	NP	6,148.69
	9/12/2013		92.00	NP	NP	6,148.67
	12/4/2013		91.96	NP	NP	6,148.71
	3/19/2014		92.09	NP	NP	6,148.58
	6/13/2014		92.06	NP	NP	6,148.61
	9/11/2014		92.13	NP	NP	6,148.54
	12/4/2014		92.10	NP	NP	6,148.57



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Well Identification	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-4	3/17/2015	6240.67*	92.17	NP	NP	6,148.50
	4/28/2016		92.25	NP	NP	6,148.42
	8/11/2016		92.32	NP	NP	6,148.35
	10/17/2016		92.29	NP	NP	6,148.38
	1/31/2017		92.31	NP	NP	6,148.36
	4/28/2017		92.31	NP	NP	6,148.36
	7/28/2017		92.36	NP	NP	6,148.31
	10/7/2019	6240.80**	92.60	NP	NP	6,148.20
	3/19/2020		92.58	NP	NP	6,148.22
	6/23/2020		92.63	NP	NP	6,148.17
	9/8/2020		92.53	NP	NP	6,148.27
	12/4/2020		92.65	NP	NP	6,148.15
	3/31/2021		92.86	NP	NP	6,147.94
	5/24/2021		92.66	NP	NP	6,148.14
	8/23/2021		92.67	NP	NP	6,148.13
	11/23/2021		92.70	NP	NP	6,148.10
	3/8/2022		92.78	NP	NP	6,148.02
	5/23/2022		NM	NM	NM	NM
	9/12/2022		92.74	NP	NP	6,148.06
	11/7/2022		92.74	NP	NP	6,148.06
	3/27/2023		92.81	NP	NP	6,147.99
	6/13/2023		92.78	NP	NP	6,148.02
	9/22/2023		92.79	NP	NP	6,148.01
	12/15/2023		92.87	NP	NP	6,147.93
MW-5	4/2/2012	6,216.97	UNK	UNK	UNK	UNK
	6/13/2012		UNK	UNK	UNK	UNK
	10/2/2012		UNK	UNK	UNK	UNK
	12/6/2012		UNK	UNK	UNK	UNK
	3/1/2013		90.48	90.46	0.02	6,126.51
	6/24/2013	6,238.33*	89.78	NP	NP	6,148.55
	9/12/2013		89.98	NP	NP	6,148.35
	12/4/2013		89.86	NP	NP	6,148.47
	3/19/2014		89.91	NP	NP	6,148.42
	6/13/2014		89.95	NP	NP	6,148.38
	9/11/2014		90.02	NP	NP	6,148.31
	12/4/2014		90.02	NP	NP	6,148.31
	3/17/2015		89.98	NP	NP	6,148.35
	4/28/2016		90.11	NP	NP	6,148.22
	8/11/2016		90.20	NP	NP	6,148.13
	10/17/2016		90.18	NP	NP	6,148.15
	1/31/2017		90.11	NP	NP	6,148.22
	4/28/2017		90.13	NP	NP	6,148.20



TABLE 1
GROUNDWATER ELEVATIONS
Florance M #047X
Harvest Four Corners, LLC
San Juan County, New Mexico

Well Identification	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-5	7/28/2017	6,238.33*	90.17	90.16	0.01	6,148.16
	10/14/2019	6,236.47**	88.30	NP	NP	6,148.17
	3/19/2020		88.37	NP	NP	6,148.10
	6/23/2020		88.41	NP	NP	6,148.06
	9/8/2020		88.35	NP	NP	6,148.12
	12/4/2020		88.42	NP	NP	6,148.05
	3/31/2021		88.55	NP	NP	6,147.92
	5/24/2021		88.43	NP	NP	6,148.04
	8/23/2021		88.46	NP	NP	6,148.01
	11/23/2021		88.51	NP	NP	6,147.96
	3/8/2022		88.46	NP	NP	6,148.01
	5/23/2022	6,236.47**	88.50	NP	NP	6,147.97
	9/12/2022		88.58	NP	NP	6,147.89
	11/7/2022		88.50	NP	NP	6,147.97
	3/27/2023		88.63	NP	NP	6,147.84
	6/13/2023		88.56	NP	NP	6,147.91
	9/22/2023		88.58	NP	NP	6,147.89
	12/15/2023		88.64	NP	NP	6,147.83
MW-6	10/14/2019	6,235.26**	88.42	NP	NP	6,146.84
	3/19/2020		88.51	NP	NP	6,146.75
	6/23/2020		88.52	NP	NP	6,146.74
	9/8/2020		88.30	NP	NP	6,146.96
	12/4/2020		88.53	NP	NP	6,146.73
	3/31/2021		88.74	NP	NP	6,146.52
	5/24/2021		88.60	NP	NP	6,146.66
	8/23/2021		88.58	NP	NP	6,146.68
	11/23/2021		88.48	NP	NP	6,146.78
	3/8/2022		88.76	NP	NP	6,146.50
	5/23/2022		88.56	NP	NP	6,146.70
	9/12/2022		88.63	NP	NP	6,146.63
	11/7/2022		88.62	NP	NP	6,146.64
	3/27/2023		88.78	NP	NP	6,146.48
	6/13/2023		89.67	NP	NP	6,145.59
MW-7	9/22/2023		88.66	NP	NP	6,146.60
	12/15/2023		88.72	NP	NP	6,146.54
	10/14/2019	6,237.28**	90.94	NP	NP	6,146.34
	3/19/2020		90.98	NP	NP	6,146.30
	6/23/2020		91.06	NP	NP	6,146.22
	9/8/2020		90.91	NP	NP	6,146.37
	12/4/2020		91.08	NP	NP	6,146.20
	3/31/2021		91.22	NP	NP	6,146.06
	5/24/2021		91.13	NP	NP	6,146.15



TABLE 1
GROUNDWATER ELEVATIONS
 Florance M #047X
 Harvest Four Corners, LLC
 San Juan County, New Mexico

Well Identification	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-7	8/23/2021	6,237.28**	91.1	NP	NP	6,146.18
	11/23/2021		91.07	NP	NP	6,146.21
	3/8/2022		91.16	NP	NP	6,146.12
	5/23/2022		91.10	NP	NP	6,146.18
	9/12/2022		91.15	NP	NP	6,146.13
	11/8/2022		91.15	NP	NP	6,146.13
	3/27/2023		91.26	NP	NP	6,146.02
	6/13/2023		91.20	NP	NP	6,146.08
	9/22/2023		91.19	NP	NP	6,146.09
	12/15/2023		91.25	NP	NP	6,146.03

Notes:

< - less than

* - Top of casing elevation was resurveyed on 6/20/13

** - Top of casing elevation was resurveyed on 12/17/2019

Groundwater elevation calculation in wells with product: (Top of Casing Elevation - Depth to Water) + (Product Thickness * 0.8)

AMSL - above mean sea level

BTOC - below top of casing

NP - no free phase hydrocarbons are present the well

UNK - data is not known



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Florance M #047X
 Harvest Four Corners, LLC
 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	1/8/1997	3,380	7,150	917	7,200
	7/13/1997	367	241	35	191
	10/1/1997	171	54	27	65
	1/6/1998	147	70	20	73.6
	3/9/1998	140	1.4	17	36
	6/11/1998	94	19	11	16.3
	8/12/1998	49	4.7	8.8	5.7
	12/15/1998	46	11	5.8	4.7
	2/9/1999	33	6.6	5.6	4.7
	4/21/1999	40	15	6.4	10.4
	7/28/1999	34	7.8	3	3.0
	11/3/1999	2.9	<0.5	<0.5	<1.5
	3/23/2000	10	1.1	<0.5	<1.5
	6/14/2000	4.1	1.4	0.6	<1.5
	11/17/2000	4.64	<1.0	<1.0	<1.0
	1/31/2001	3.67	1.44	<1.0	<1.0
	4/30/2001	5.44	1.90	<1.0	1.78
	10/10/2001	1.1	<2.0	<2.0	<2.0
	12/2/2003	<2.0	<2.0	<2.0	<5.0
	9/20/2004	3.4	<2.0	<2.0	<5.0
	12/3/2004	<2.0	<2.0	<2.0	<5.0
	3/10/2005	<2.0	<2.0	<2.0	<5.0
	6/18/2005	<2.0	<2.0	<2.0	<5.0
	7/13/2006	2.2	<1.0	<1.0	<3.0
	9/21/2006	4.9	<1.0	<1.0	<3.0
	3/29/2010	<1.0	<1.0	<1.0	<3.0
	6/18/2010	<1.0	<1.0	<1.0	<3.0
	9/10/2010	1.2	<1.0	<1.0	<3.0
	12/4/2010	<1.0	<1.0	<1.0	<3.0
	3/2/2011	<1.0	<1.0	<1.0	<3.0
	6/14/2011	3.6	<1.0	<1.0	<3.0
	9/12/2011	<1.0	<1.0	<1.0	<3.0
	1/3/2012	<1.0	<1.0	<1.0	<3.0



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Florance M #047X
 Harvest Four Corners, LLC
 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	4/2/2012	<1.0	<1.0	<1.0	<3.0
	6/13/2012	<1.0	<1.0	<1.0	<3.0
	10/2/2012	1.1	<1.0	<1.0	<3.0
	12/6/2012	<1.0	<1.0	<1.0	<3.0
	3/1/2013	<1.0	<1.0	<1.0	<2.0
	11/1/2019	1.4	<1.0	<1.0	<1.5
	6/23/2020	NS	NS	NS	NS
	5/24/2021	NS	NS	NS	NS
	5/23/2022	NS	NS	NS	NS
	6/13/2023	NS	NS	NS	NS
MW-2	8/12/1998	9,800	14,000	920	9,200
	12/15/1998	12,000	17,000	870	8,700
	2/9/1999	11,000	16,000	720	7,300
	4/21/1999	14,000	20,000	850	8,500
	7/28/1999	11,000	15,000	740	6,800
	11/3/1999	11,000	14,000	770	8,100
	3/23/2000	12,000	15,000	810	8,200
	6/14/2000	6,400	7,000	570	5,800
	11/17/2000	5,980	3,240	600	4,780
	1/31/2001	6,300	2,790	458	5,490
	4/30/2001	7,160	2,200	404	7,060
	10/10/2001	4,500	1,000	390	3,800
	12/2/2003	11,000	<100	540	6,400
	9/20/2004	11,000	<200	600	5,800
	12/3/2004	11,000	<200	630	6,300
	3/10/2005	10,000	38	490	5,700
	6/18/2005	9,700	<100	640	6,000
	9/16/2005	8,900	31	370	4,800
	11/30/2005	<2.0	2.9	<2.0	12.2
	7/18/2006	16,900	<10.0	753	4,370
	3/29/2010	9,460	67	521	6,210
	6/18/2010	3,270	<1.0	260	3,530
	12/4/2010	1,470	26.3	599	2,720
	3/2/2011	2,530	1.4	764	3,700



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Florance M #047X
 Harvest Four Corners, LLC
 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-2	6/14/2011	8,500	<20.0	537	4,490
	1/3/2012	9,400	<50.0	710	6,340
	4/2/2012	10,000	710	<100	6,390
	6/13/2012	11,200	716	<50.0	6,790
	10/2/2012	10,200	765	<100	7,260
	12/6/2012	8,280	722	<50.0	5,610
	3/4/2013	8,600	<10	<10	6,500
	6/24/2013	6,300	<10	600	5,800
	9/12/2013	NS	NS	NS	NS
	12/4/2013	39	72	<5.0	150
	3/19/2014	9,700	<10	760	7,000
	6/13/2014	8,600	<10	290	5,800
	9/11/2014	9,700	<10	490	7,200
	12/8/2014	9,400	<10	360	6,900
	3/17/2015	5,000	<20	340	3,000
	4/28/2017	5,100	<5	410	3,600
	11/1/2019	4,600	<1.0	270	190
	6/23/2020	8,200	<20	410	150
	5/24/2021	28	<1.0	5.1	6.7
	5/23/2022	1,800	<1.0	140	38.0
	6/13/2023	46	<1.0	5.5	1.8
MW-3	4/2/2012	NS	NS	NS	NS
	6/13/2012	NS	NS	NS	NS
	10/2/2012	NS	NS	NS	NS
	12/6/2012	NS	NS	NS	NS
	3/1/2013	NS-FP	NS-FP	NS-FP	NS-FP
	6/24/2013	NS-FP	NS-FP	NS-FP	NS-FP
	9/12/2013	NS-FP	NS-FP	NS-FP	NS-FP
	12/4/2013	NS-FP	NS-FP	NS-FP	NS-FP
	3/19/2014	NS-FP	NS-FP	NS-FP	NS-FP
	6/13/2014	NS-FP	NS-FP	NS-FP	NS-FP
	9/11/2014	NS-FP	NS-FP	NS-FP	NS-FP
	12/4/2014	NS-FP	NS-FP	NS-FP	NS-FP
	3/17/2015	NS-FP	NS-FP	NS-FP	NS-FP



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Florance M #047X
 Harvest Four Corners, LLC
 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-3	11/1/2019	NS-FP	NS-FP	NS-FP	NS-FP
	6/23/2020	NS-FP	NS-FP	NS-FP	NS-FP
	5/24/2021	NS-FP	NS-FP	NS-FP	NS-FP
	5/23/2022	NS-FP	NS-FP	NS-FP	NS-FP
	6/13/2023	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	12/15/1998	44	11	5.8	4.8
	2/9/1999	11,000	16,000	730	7,300
	4/21/1999	68	25	9.3	13
	7/2/1999	11,000	14,000	700	6,700
	3/23/2000	11,000	13,000	770	7,800
	6/14/2000	28	42	7	135
	11/17/2000	59.9	104	2.94	98.3
	1/31/2001	30.3	81.0	5.20	156
	4/30/2001	36.1	56.1	1.32	73
	10/10/2001	24	28	<2.0	47
	12/2/2003	2.3	2.7	<2.0	6.5
	9/20/2004	3.6	3.2	<2.0	9.8
	12/3/2004	2.5	2.3	<2.0	8
	3/10/2005	3.0	3.5	<2.0	11
	6/18/2005	<2.0	3	<2.0	8.6
	9/16/2005	<2.0	2.3	<2.0	9.4
	11/30/2005	<2.0	<2.0	<2.0	10.4
	7/13/2006	2.9	<1.0	1.0	9.9
	9/21/2006	1.2	<1.0	<1.0	9.6
	3/29/2010	1.3	<1.0	<1.0	8.7
	6/18/2010	<1.0	<1.0	<1.0	6.8
	9/10/2010	<1.0	<1.0	<1.0	3.9
	12/4/2010	<1.0	<1.0	<1.0	5.6
	3/2/2011	<1.0	<1.0	<1.0	3
	6/14/2011	<1.0	<1.0	<1.0	6
	9/12/2011	<1.0	<1.0	<1.0	4.7
	1/3/2012	<1.0	<1.0	<1.0	5.4
	4/2/2012	<1.0	<1.0	<1.0	6.1
	6/13/2012	<1.0	<1.0	<1.0	3.7



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Florance M #047X
 Harvest Four Corners, LLC
 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-4	10/2/2012	<1.0	<1.0	<1.0	4.5
	12/6/2012	<1.0	<1.0	<1.0	6
	3/1/2013	<1.0	<1.0	<1.0	<2.0
	11/1/2019	<1.0	<1.0	<1.0	<1.5
	6/23/2020	NS	NS	NS	NS
	5/24/2021	NS	NS	NS	NS
	5/23/2022	NS	NS	NS	NS
	6/13/2023	NS	NS	NS	NS
MW-5	6/14/2000	1,100	710	100	1,100
	6/14/2000	890	570	80	900
	11/17/2000	161	110	8.09	60.8
	4/30/2001	15.7	21.6	2.01	17.9
	10/10/2001	380	120	19	220
	12/2/2003	41	7.9	3.1	10
	9/20/2004	17	3.7	<2.0	9.9
	12/9/2004	13	3.3	<2.0	14
	3/10/2005	5.5	<2.0	<2.0	6.3
	7/13/2006	920	74	34.7	1,980
	9/21/2006	135	19.2	17.0	409
	4/2/2012	NS	NS	NS	NS
	6/13/2012	NS	NS	NS	NS
	10/2/2012	NS	NS	NS	NS
	12/6/2012	NS	NS	NS	NS
	3/1/2013	NS-FP	NS-FP	NS-FP	NS-FP
	6/24/2013	930	<50	98	1,100
	9/12/2013	2,400	40	250	3,800
	12/4/2013	410	46	51	1,000
	3/19/2014	920	3.1	100	660
	6/13/2014	4,000	<20	480	1,700
	9/11/2014	3,000	33	370	2,800
	12/4/2014	3,000	14	390	2,900
	3/17/2015	570	<10	52	660
	4/28/2016	270	<10	30	400
	4/28/2017	380	<2.0	55	560



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Florance M #047X
 Harvest Four Corners, LLC
 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-5	11/1/2019	2,200	<1.0	150	210
	6/23/2020	360	<2.0	2.4	210
	5/24/2021	58	<5.0	<5.0	21
	5/23/2022	210	<2.0	18	15
	6/13/2023	5,300	<10	320	480
MW-6	11/1/2019	<1.0	<1.0	<1.0	<1.5
	6/23/2020	<1.0	<1.0	<1.0	<1.5
	5/4/2021	<1.0	<1.0	<1.0	<2.0
	5/23/2022	<1.0	<1.0	<1.0	<1.5
	6/13/2023	<1.0	<1.0	<1.0	<1.5
MW-7	11/1/2019	<1.0	<1.0	<1.0	<1.5
	6/23/2020	<1.0	<1.0	<1.0	<1.5
	5/4/2021	<1.0	<1.0	<1.0	<2.0
	5/23/2022	<1.0	<1.0	<1.0	<1.5
	6/13/2023	<1.0	<1.0	<1.0	<1.5

Notes:

< - indicates result is less than laboratory reporting detection limit

µg/L: milligrams per liter

NS - not sampled

NS-FP - not sampled due to the presence of free phase hydrocarbons (PSH) in the well

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 shaded exceed the New Mexico Water Quality Control Commission Standards, 20.6.2 of the New Mexico Administrative Code



APPENDIX A

Groundwater Collection Forms

Released to Imaging: 5/13/2024 3:58:03 PM

Released to Imaging: 5/13/2024 3:58:03 PM



APPENDIX B

Laboratory Analytical Rports



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 28, 2023

Eric Carroll

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Florance 47x

OrderNo.: 2306817

Dear Eric Carroll:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/15/2023 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

CLIENT: Harvest
Project: Florance 47x
Lab ID: 2306817-001

Client Sample ID: MW-2
Collection Date: 6/13/2023 12:53:00 PM
Matrix: GROUNDWA
Received Date: 6/15/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA	
Benzene	46	1.0		µg/L	1	6/22/2023 5:14:14 PM	SL97656
Toluene	ND	1.0		µg/L	1	6/22/2023 5:14:14 PM	SL97656
Ethylbenzene	5.5	1.0		µg/L	1	6/22/2023 5:14:14 PM	SL97656
Xylenes, Total	1.8	1.5		µg/L	1	6/22/2023 5:14:14 PM	SL97656
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	6/22/2023 5:14:14 PM	SL97656
Surr: Dibromofluoromethane	108	70-130		%Rec	1	6/22/2023 5:14:14 PM	SL97656
Surr: Toluene-d8	93.8	70-130		%Rec	1	6/22/2023 5:14:14 PM	SL97656

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.		

Page 1 of 6

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2306817
Date Reported: 6/28/2023

CLIENT: Harvest

Client Sample ID: MW-5

Project: Florance 47x

Collection Date: 6/13/2023 1:25:00 PM

Lab ID: 2306817-002

Matrix: GROUNDWA

Received Date: 6/15/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA	
Benzene	5300	100		µg/L	100	6/23/2023 4:59:35 PM	R97702
Toluene	ND	10		µg/L	10	6/22/2023 5:42:38 PM	SL97656
Ethylbenzene	320	10		µg/L	10	6/22/2023 5:42:38 PM	SL97656
Xylenes, Total	480	15		µg/L	10	6/22/2023 5:42:38 PM	SL97656
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%Rec	10	6/22/2023 5:42:38 PM	SL97656
Surr: Dibromofluoromethane	97.7	70-130		%Rec	10	6/22/2023 5:42:38 PM	SL97656
Surr: Toluene-d8	97.2	70-130		%Rec	10	6/22/2023 5:42:38 PM	SL97656

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.		

CLIENT: Harvest

Project: Florance 47x

Lab ID: 2306817-003

Client Sample ID: MW-6

Collection Date: 6/13/2023 2:06:00 PM

Received Date: 6/15/2023 7:00:00 AM

Matrix: GROUNDWA

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA	
Benzene	ND	1.0		µg/L	1	6/23/2023 5:27:28 PM	R97702
Toluene	ND	1.0		µg/L	1	6/23/2023 5:27:28 PM	R97702
Ethylbenzene	ND	1.0		µg/L	1	6/23/2023 5:27:28 PM	R97702
Xylenes, Total	ND	1.5		µg/L	1	6/23/2023 5:27:28 PM	R97702
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	6/23/2023 5:27:28 PM	R97702
Surr: Dibromofluoromethane	121	70-130		%Rec	1	6/23/2023 5:27:28 PM	R97702
Surr: Toluene-d8	87.9	70-130		%Rec	1	6/23/2023 5:27:28 PM	R97702

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.		

CLIENT: Harvest

Client Sample ID: MW-7

Project: Florance 47x

Collection Date: 6/13/2023 2:53:00 PM

Lab ID: 2306817-004

Matrix: GROUNDWA

Received Date: 6/15/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA	
Benzene	ND	1.0		µg/L	1	6/22/2023 6:38:22 PM	SL97656
Toluene	ND	1.0		µg/L	1	6/22/2023 6:38:22 PM	SL97656
Ethylbenzene	ND	1.0		µg/L	1	6/22/2023 6:38:22 PM	SL97656
Xylenes, Total	ND	1.5		µg/L	1	6/22/2023 6:38:22 PM	SL97656
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	6/22/2023 6:38:22 PM	SL97656
Surr: Dibromofluoromethane	121	70-130		%Rec	1	6/22/2023 6:38:22 PM	SL97656
Surr: Toluene-d8	94.5	70-130		%Rec	1	6/22/2023 6:38:22 PM	SL97656

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.		

Page 4 of 6

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2306817

28-Jun-23

Client: Harvest
Project: Florance 47x

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: LCSW	Batch ID: SL97656		RunNo: 97656							
Prep Date:	Analysis Date: 6/22/2023		SeqNo: 3551248		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	19	1.0	20.00	0	97.5	70	130			
Surr: 1,2-Dichloroethane-d4	12		10.00		119	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		91.0	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	9.6		10.00		96.0	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBW	Batch ID: SL97656		RunNo: 97656							
Prep Date:	Analysis Date: 6/22/2023		SeqNo: 3551257		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	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		88.6	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.9		10.00		98.6	70	130			

Sample ID: 100NG LCS	SampType: LCS4		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: BatchQC	Batch ID: R97702		RunNo: 97702							
Prep Date:	Analysis Date: 6/23/2023		SeqNo: 3553294		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	80	120			
Toluene	18	1.0	20.00	0	89.9	80	120			
Ethylbenzene	18	1.0	20.00	0	87.7	80	120			
Xylenes, Total	56	1.5	60.00	0	92.6	80	120			
Surr: 1,2-Dichloroethane-d4	11		10.00		113	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		90.5	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	8.9		10.00		89.5	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBW	Batch ID: R97702		RunNo: 97702							
Prep Date:	Analysis Date: 6/23/2023		SeqNo: 3553307		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: 2306817

28-Jun-23

Client: Harvest

Project: Florance 47x

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBW	Batch ID: R97702	RunNo: 97702								
Prep Date:	Analysis Date: 6/23/2023	SeqNo: 3553307	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	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.6	70	130			
Surr: Dibromofluoromethane	11		10.00		115	70	130			
Surr: Toluene-d8	9.1		10.00		91.3	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

Page 6 of 6



Hall Environmental Analysis Laboratory
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: Harvest

Work Order Number: 2306817

RcptNo: 1

Received By: Cheyenne Cason

6/15/2023 7:00:00 AM

Completed By: Tracy Casarrubias

6/15/2023 10:18:29 AM

Reviewed By:

7/26/23

Handwritten signature

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 cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

SCM 06/15/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Yes	Yogi		

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 327914

CONDITIONS

Operator: Harvest Four Corners, LLC 1755 Arroyo Dr Bloomfield, NM 87413	OGRID: 373888
	Action Number: 327914
	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 Florance M#047X, Harvest Four Corners, LLC: Content Satisfactory 1. Continue monthly site visits for manual removal of PSH and assessing other options for LNAPL removal. 2. Continue to conduct groundwater monitoring for BTEX as scheduled annually 3. Submit the 2024 annual groundwater monitoring report by April 1, 2025.	5/13/2024