1. Continue as stated within section 6.0 (includes 6.1 & 6.2) of report.
2. Submit fourth quarter 2022 report by January 31, 2023.
3. OCD grants Harvest bi-annual reporting starting with 1st half of 2023.
4. Submit first bi-annual report by July 31, 2023.

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2022 Third Quarter – Remediation System Operation and Monitoring Report

Property:

Florance Gas Com J No. 16A
Harvest Four Corners, LLC
San Juan County, New Mexico

API # 30-045-21790
Incident # NCS1629854256
Remediation Permit Number 3RP-364

October 27, 2022
Ensolum Project No. 07B2002007

Prepared for:

New Mexico Oil Conservation Division - District III
New Mexico Energy, Minerals, and Natural Resources Department
1000 Rio Brazos Road
Aztec, New Mexico 87410

Prepared by:
Ensolum, LLC
776 East 2nd Ave
Durango, CO 81301

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APPENDICES

2022 Third Quarter – Remediation System Operation and Monitoring Report

Incident # NCS1629854256
Remediation Permit Number 3RP-364

Ensolum Project No. 07B2002007

1.0 INTRODUCTION

Ensolum, LLC (Ensolum), on behalf of Harvest Four Corners, LLC (Harvest), presents this *2022 Third Quarter - Remediation System Operation and Monitoring Report* summarizing remediation system performance during the third quarter of 2022 at the Florance Gas Com J No. 16A (Site; Remediation Permit Number 3RP-364, Incident # NCS1629854256). The duration of operation and monitoring acitivies included in this report is for the period from June 28, 2022, through September 21, 2022.

This report was prepared following the conditions of approval from the New Mexico Oil Conservation Division (NMOCD) regarding the dual-phase extraction (DPE) remediation system described in the *Remedial Assessment Report* submitted by Aptim Environmental & Infrastructure, Inc. in November 2017. Per the requirements, this report includes the following:

- A summary of remediation activities during the quarter;
- The system run time summary (90% run time required);
- The petroleum mass removal and fluid product recovery from the remediation system;
- Amount of liquid captured from the concrete trap/secondary seep tank; and
- Quarterly gas sample analysis results.

As stated in the *2018 Annual Groundwater and Remediation Update Report* submitted in June 2019, the quarterly remediation summary reports also include data and summaries from the groundwater sampling events.

2.0 REMEDIATION SYSTEM DESCRIPTION

The remediation system at the Site includes a DPE system which uses two high vacuum rotary claw blowers to apply vacuum to remediation wells that are connected to the blowers via subsurface piping. The extracted air, petroleum vapors, and fluids enter a vapor/liquid separator or “knock out” tank. Air and petroleum vapors are passed through the two extraction high vacuum blowers and discharged to the atmosphere via an exhaust stack. Separated liquid, which includes light non-aqueous phase liquids (LNAPL) and potentially impacted groundwater, is pumped to an above ground storage tank for storage and offsite disposal. Operation of the remediation wells is cycled through four zones, with four to six remediation wells per zone. The system layout is depicted on Figure 1. Reports summarizing remediation system operation for the previous quarters of system operation have been submitted to the NMOCD by Harvest and previous consultants.

3.0 SYSTEM OPERATION AND MONITORING

Regular bi-weekly system operations and maintenance activities have been performed through the third quarter of 2022. These site visits and monitoring events are summarized in tables enclosed at the end of this report, including the final visit of the quarter on September 21, 2022. As proposed in the previous quarterly report, remediation efforts in the second quarter 2022 were focused on Zone 2 and Zone 4.

3.1 Vapor Recovery

Remediation system runtime is listed in Table 1, with an average run time for the third quarter 2022 of 90 percent (%), and a cumulative overall run time of 92%. Occasionally, system operations were interrupted for routine equipment maintenance. The system is currently operating with only one high vacuum blower, as the other is being serviced for repairs/replacement. However, the single high vacuum blower currently in operation can achieve required vacuum and flow rates in the subsurface to accomplish soil and groundwater remediation.

Influent air samples from the DPE system were collected following different remediation zone cycling events. During the third quarter 2022, a total of two air samples were collected. Influent air samples were collected using a high vacuum air sampling pump on the system inlet, after the remediation zone manifold assembly, but prior to the liquid knock out tank. Samples were collected in 1-Liter Tedlar® bags and submitted to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico for analyses of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method 8021B and total petroleum hydrocarbons (TPH) by EPA Method 8015D. One sample per quarter is also analyzed for full list of volatile organic compounds (VOCs) by EPA Method 8260B and fixed natural gas analysis including oxygen and carbon dioxide. The analytical results from the third quarter of 2022 are summarized in Table 2. Copies of the laboratory analytical reports for the vapor samples are provided as Appendix A.

Since remediation system startup in May 2018, the calculated total mass of VOCs removed thus far is 3,596 pounds (lbs). In the third quarter 2022, the calculated mass removal rate based on field and analytical results ranged from 0.306 lbs per day to 0.561 lbs per day. During the third quarter 2022, a total of 40 lbs of VOCs were removed through September 21, 2022. Air emission calculations and removal rates are summarized on Table 3.

3.2 Liquid Recovery

Total liquid recovery volumes are measured using a totalizing flow metering device. Since startup of the system on May 4, 2018, through September 21, 2022, approximately 326,289 gallons of liquid have been recovered. The impacted groundwater and recovered LNAPL are emulsified and homogenously commingled enough during extraction that product thickness is unmeasurable in the liquid recovery tank. Therefore, the estimated volume of product recovered is not measurable and not reported.

Operational measurements including flow and vacuum rates for individual remediation wells are summarized in Table 5. Specific remediation zone observations and adjustments are also included in this table.

4.0 CONCRETE TRAP/SEEP MONITORING

The concrete trap collection sump and collection tank connected to the east and west seep areas was inspected for liquid recovery during the third quarter 2022. No observable LNAPL or additional liquids were observed in the seep collection tank. Approximately 200 gallons of water have consistently been observed in the seep collection tank, likely a result of precipitation events and stormwater runoff into the concrete sump. The collection sump and tank will continue to be monitored during future site visits. If there is an observable increase in liquid recovery levels and a constant flow of liquids into the tank is available, a sample will be collected and analyzed for BTEX. The collection tank levels will be monitored and emptied as needed.

5.0 GROUNDWATER MONITORING

The annual groundwater sampling event occurred in second quarter 2022, as proposed in the in the fourth quarter 2019, *Quarterly Remediation System Operation and Monitoring Report*. No additional groundwater sampling was completed in third quarter 2022.

6.0 NEXT QUARTER PROPOSED OPERATIONS

6.1 System Operation

The DPE remediation system will continue operating with the goal of optimizing vapor and liquid recovery. A decline in vapor-phase VOC concentrations and observed LNAPL thickness from each remediation zone has been observed, as expected with this remediation technique. During the third quarter 2022, the DPE system was focused on remediation Zone 2 and Zone 4. This approach will continue into the next quarter.

During the next quarter of operations and maintenance, the following actions are proposed:

- Bi-weekly (every other week) to monthly system operation and maintenance visits, including cycling between remediation zones;
- During routine visits, the DPE system will temporarily be isolated to only remediation wells where LNAPL has been observed for approximately one hour, and then the remediation zone will be changed;
- Groundwater and LNAPL will be gauged in monitoring and remediation wells to evaluate the presence and/or migration of LNAPL;
- LNAPL will be manually removed via bailer during routine visits if a large enough LNAPL thickness is measured;
- LNAPL recovery socks will be placed in any monitoring wells where LNAPL is measured in between site visits;
- Newly installed/converted remediation well MW-15 will continually operate in both remediation Zone 2 and Zone 4;
- Costs and feasibility of replacing non-operational high vacuum blower pump will be assessed;
- At least one influent air extraction sample per quarter will be analyzed for Full 8260 VOCs, carbon dioxide, and oxygen; and
- When influent air samples are not collected, a photoionization detector (PID) will be used to estimate vapor exhaust concentrations.

6.2 Reporting

Updated quarterly reports will be prepared and submitted to the NMOCD within 30 days following the end of each quarter and will contain the following:

- A summary of remediation and monitoring activities during the quarter;
- System run-time summary;
- Petroleum hydrocarbon mass removal and fluid recovery from the remediation system;
- DPE volume removal and product recovery;
- Observations of concrete trap/collection tank;
- Quarterly gas sample analysis results; and
- Groundwater monitoring results.

Ensolum appreciates the opportunity to submit this report to the NMOCD on behalf of Harvest. If there are any questions or comments regarding this report, please contact Danny Burns at 303-601-1420 or dburns@ensolum.com.

Sincerely,

Ensolum, LLC

Danny Burns
Senior Geologist
303-601-1420
dburns@ensolum.com

Hannah Mishriki, PE
Senior Engineer
610-390-7059
hmishriki@ensolum.com

cc: Oakley Hayes, Harvest Four Corners, LLC

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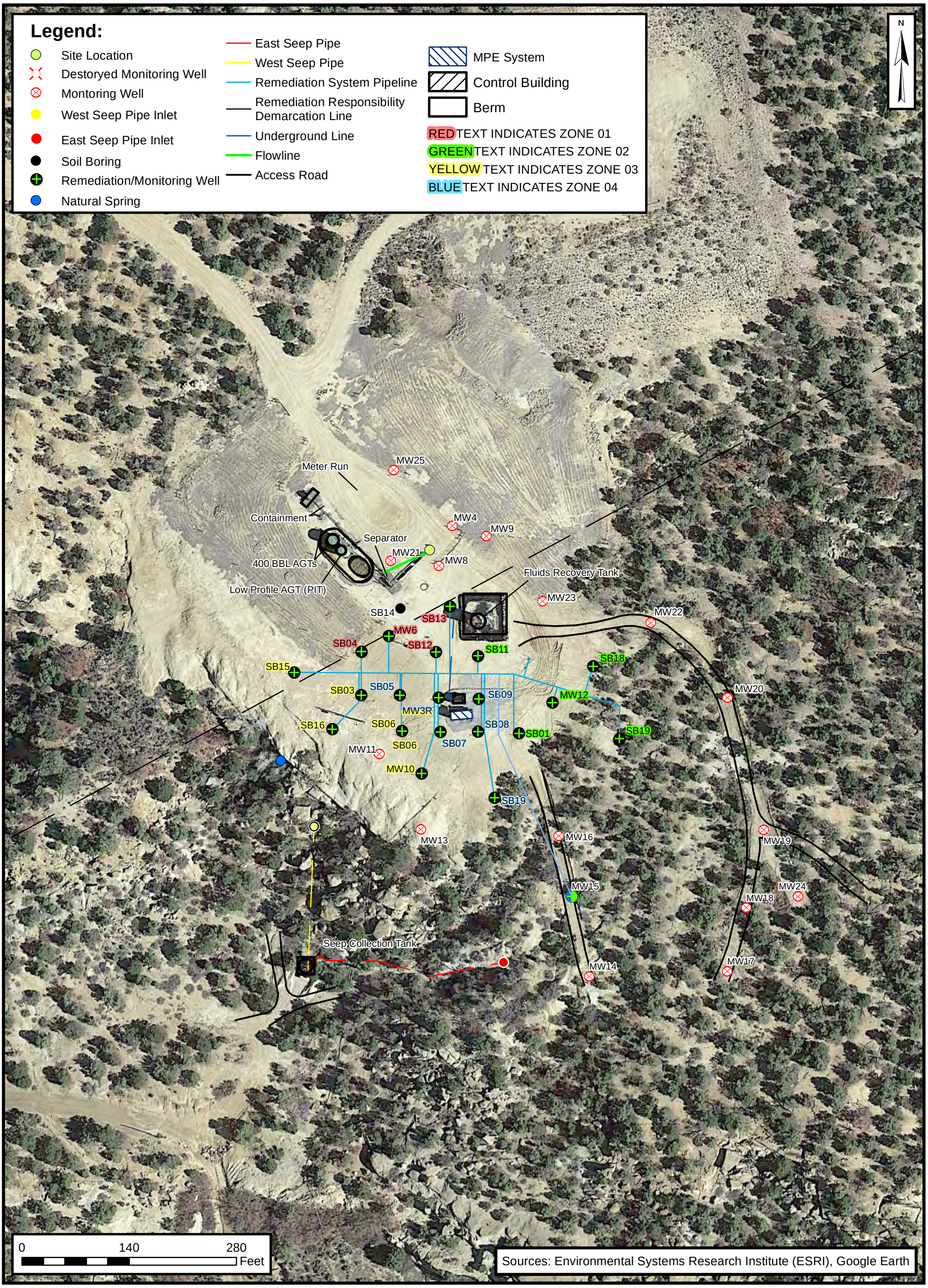
FIGURES



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Remediation System Layout

Florance GC J#16A
Harvest Four Corners, LLC
UNIT P SEC 6 T30N R9W
San Juan County, NM

FIGURE

#1

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TABLES

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TABLE 1
Remediation Systems Operational Run-Time - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Date/Time of Reading	System Hour Runtime	Cumulative Run Time (%)	Run Time (%)	Notes
5/1/18 0:00	0			
5/4/18 9:00	42	START UP		
Earlier Data Provided in Previous Quarterly Reports				
6/28/2022 12:00	33,419	92%	99%	Clean and reinstall transfer pump
7/1/2022 0:00	33,479	92%	100%	Start of Q3 2022
7/18/2022 12:20	33,891	92%	98%	
8/5/2022 11:45	34,323	92%	99%	Clean float tube and wye strainer
8/12/2022 13:00	--	--	--	Water floor sump; leak repaired - system restarted
9/8/2022 12:00	34,953	92%	88%	Clean float tube and wye strainer
9/21/2022 11:00	35,262	92%	90%	Troubleshoot fan in process room
	Average Q3 2022 Run Time		90%	

Notes:
% - percent
Dashed line indicates quarter change
-- : not applicable/not collected

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TABLE 2
Extracted Air VOC Data - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Collection Date:	**6/21/2022**	**8/5/2022**	**9/21/2022**
Collection Time:	14:40	16:20	10:00
Active Remediation Zone:	4	2	4
Benzene (µg/L)	1.5	1.9	0.1
Toluene (µg/L)	6.5	3.4	0.36
Ethylbenzene (µg/L)	0.85	<0.50	<0.10
Xylenes, Total (µg/L)	18.0	9.4	<0.10
GRO (µg/L)	4,500	2,100	350
Total VOCs (µg/L):	26.9	14.7	0.46
PID Reading (ppm)	231	277	75

Notes:
GRO - gasoline range organics
µg/L - micrograms per liter
ppm - parts per million
PID - photo-ionization detector
VOCs - volatile organic compounds

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TABLE 3
Mass Removal Vapor Phase - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Date/Time	Influent VOCs (mg/m^3)	Active Remediation Zone	Air Flow Rate (scfm)	Time Period (hr:min:sec)	Time Period (min)	VOC Mass Removed (lbs)	Gal Removed (@0.755 g/cm^3)	Mass Removal Rate (lbs/day)	Mass Removal Rate (ton/yr)
Earlier Data Provided in Previous Quarterly Reports									
6/21/22 12:00	26.9	4	233	694:45:00	41,685	10.9	1.7	0.376	0.069
8/5/22 11:40	14.7	2	232	1079:40:00	64,780	25.3	4.0	0.561	0.102
9/21/22 12:40	0.5	4	205	1129:00:00	67,740	14.4	2.3	0.306	0.056
Total Quantity of Hydrocarbon VOC Removed 3rd Quarter 2022						40 lbs	6.3 gal	0.1 bbl	
Total Quantity of Hydrocarbon VOC Removed Since Start-up May 2018						3,596 lbs	661.0 gal	15.7 bbl	

Notes:

bbl - barrel
gal - gallons
g/cm^3 - grams per cubic centimeter
hr - hour
lbs - pounds
lbs/day - pounds per day
mg/m^3 - milligrams per cubic meter
min - minute
scfm - standard cubic foot per minute
sec - second
ton/yr - ton per year
VOCs - volatile organic compounds
yr - year
Dashed line indicates a quarter change

VOC Mass Removed (lbs) = Influent VOCs (mg/m^3)*Air Flow Rates (scfm)*(1 m^3/35.3147 ft^3)*(1 lb/453592 mg)*Time Period (min)

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TABLE 4
Liquid Recovery - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Date/Time	Hour Meter Reading	Flow Meter Reading (gal)	Gallons Recovered this Period	Cumulative Volume Recovered (gal)	Gallons Removed From Tank (Off-Site)	Time Period (hr:min:sec)	Time Period (min)	Recovery Rate		Notes
								(gpm)	(gal/day)	
Earlier Data Provided in Previous Quarterly Reports										
6/21/22 11:45	33,258	293,323	1,171	320,623	6,720	695:45:00	41,745	0.03	40	Zone 4 active
8/5/22 11:40	34,323	295,545	2,222	322,845		1079:55:00	64,795	0.03	49	Zone 2 Active
9/21/22 11:00	35,262	298,989	3,444	326,289	6,720	1127:20:00	67,640	0.05	73	Zone 4 Active

Notes:

bbl - barrel
ft - feet
gal - gallon
gal/day - gallon per day
gpm - gallon per minute
hr - hour
in - inch
LNAPL - light non-aqueous phase liquid
min - minute
sec - second
Dashed line indicated quarter change
=-- - not applicable

Total Quantity of Liquid Removed:	326,289	Gal
	7,769	bbl

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TABLE 5
DPE System Operations - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Well ID		Date	8/5/2022	9/21/2022
Active Zone			2	4
MW-06	WH Vac (Online)	inHg	--	--
Zone 1	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-04	WH Vac (Online)	inHg	--	--
Zone 1	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-12	WH Vac (Online)	inHg	--	--
Zone 1	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-13	WH Vac (Online)	inHg	--	--
Zone 1	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--

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TABLE 5
DPE System Operations - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Well ID		Date	8/5/2022	9/21/2022
Active Zone			2	4
MW-12	WH Vac (Online)	inHg	9.0	--
Zone 2	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	9.0	--
	PID	ppm	81	--
	Flow	scfm	24	--
SB-01	WH Vac (Online)	inHg	15.0	--
Zone 2	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	10.0	--
	PID	ppm	175	--
	Flow	scfm	44	--
SB-10	WH Vac (Online)	inHg	10.0	--
Zone 2	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	10.0	--
	PID	ppm	24	--
	Flow	scfm	32	--
SB-11	WH Vac (Online)	inHg	8.0	--
Zone 2	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	10.0	--
	PID	ppm	57	--
	Flow	scfm	40	--
SB-18	WH Vac (Online)	inHg	10.0	--
Zone 2	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	10.0	--
	PID	ppm	82	--
	Flow	scfm	34	--
SB-19	WH Vac (Online)	inHg	Buried	--
Zone 2	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	10.0	--
	PID	ppm	290	--
	Flow	scfm	58	--

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TABLE 5
DPE System Operations - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Well ID		Date	8/5/2022	9/21/2022
Active Zone			2	4
MW-3R	WH Vac (Online)	inHg	--	--
Zone 3	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
MW-10	WH Vac (Online)	inHg	--	--
Zone 3	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-03	WH Vac (Online)	inHg	--	--
Zone 3	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-06	WH Vac (Online)	inHg	--	--
Zone 3	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-15	WH Vac (Online)	inHg	--	--
Zone 3	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--
SB-16	WH Vac (Online)	inHg	--	--
Zone 3	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--

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TABLE 5
DPE System Operations - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Well ID		Date	8/5/2022	9/21/2022
Active Zone			2	4
MW-3R	WH Vac (Online)	inHg	--	--
Zone 4	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	9.0
	PID	ppm	--	--
	Flow	scfm	--	40
SB-05	WH Vac (Online)	inHg	--	--
Zone 4	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	9.0
	PID	ppm	--	--
	Flow	scfm	--	35
SB-07	WH Vac (Online)	inHg	--	9.0
Zone 4	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	10.0
	PID	ppm	--	28
	Flow	scfm	--	40
SB-08	WH Vac (Online)	inHg	--	9.0
Zone 4	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	7.5
	PID	ppm	--	38
	Flow	scfm	--	45
SB-09	WH Vac (Online)	inHg	--	9.0
Zone 4	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	7.5
	PID	ppm	--	38
	Flow	scfm	--	45
SB-17	WH Vac (Online)	inHg	--	--
Zone 4	WH Vac (Offline)	inH2O	--	--
	Mani Vac	inHg	--	--
	PID	ppm	--	--
	Flow	scfm	--	--

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TABLE 5
DPE System Operations - Third Quarter 2022
Harvest Four Corners - Florance GCJ #16A
San Juan County, New Mexico

Ensolum Project No. 07B2002007

Well ID		Date	8/5/2022	9/21/2022
Active Zone			2	4
Well Field	Total Flow in Active Zone	scfm	232	205

Notes:
in HG - inches of mercury
inH2O - inches of water
Mani Vac - vacuum gauge reading on remediation well manifold
PID - photoionization detector
ppm - parts per million
scfm - standard cubic feet per minute
% - percent
WH Vac - vacuum gauge reading on remediation well head

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APPENDIX A

Laboratory Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 18, 2022

Oakley Hayes
Harvest
1755 Arroyo Dr.
Bloomfield, NM 87413
TEL: (505) 632-4475
FAX:

RE: Florance GC J 16A OrderNo.: 2208426

Dear Oakley Hayes:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/6/2022 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 Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208426**
Date Reported: **8/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent Zone 02
Project: Florance GC J 16A
Collection Date: 8/5/2022 4:20:00 PM
Lab ID: 2208426-001 **Matrix:** AIR
Received Date: 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	2100	25		µg/L	5	8/16/2022 1:03:00 PM	G90301
Surr: BFB	94.5	70-130		%Rec	5	8/16/2022 1:03:00 PM	G90301
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	1.9	0.50		µg/L	5	8/16/2022 1:03:00 PM	SL90301
Toluene	3.4	0.50		µg/L	5	8/16/2022 1:03:00 PM	SL90301
Ethylbenzene	ND	0.50		µg/L	5	8/16/2022 1:03:00 PM	SL90301
Xylenes, Total	9.4	0.75		µg/L	5	8/16/2022 1:03:00 PM	SL90301
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	5	8/16/2022 1:03:00 PM	SL90301
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	5	8/16/2022 1:03:00 PM	SL90301
Surr: Dibromofluoromethane	102	70-130		%Rec	5	8/16/2022 1:03:00 PM	SL90301
Surr: Toluene-d8	115	70-130		%Rec	5	8/16/2022 1:03:00 PM	SL90301

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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208426**

18-Aug-22

Client: Harvest

Project: Florance GC J 16A

Sample ID: **2208426-001adup** SampType: **DUP** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **Influent Zone 02** Batch ID: **SL90301** RunNo: **90301**

Prep Date: Analysis Date: **8/16/2022** SeqNo: **3222677** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.0	0.50						4.09	20	
Toluene	3.5	0.50						3.10	20	
Ethylbenzene	ND	0.50						0	20	
Xylenes, Total	9.8	0.75						3.87	20	
Surr: 1,2-Dichloroethane-d4	5.2		5.000		103	70	130	0	0	
Surr: 4-Bromofluorobenzene	5.2		5.000		104	70	130	0	0	
Surr: Dibromofluoromethane	5.2		5.000		104	70	130	0	0	
Surr: Toluene-d8	5.6		5.000		112	70	130	0	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208426**
18-Aug-22

Client: Harvest
Project: Florance GC J 16A

Sample ID: **2208426-001adup** SampType: **DUP** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **Influent Zone 02** Batch ID: **G90301** RunNo: **90301**
Prep Date: Analysis Date: **8/16/2022** SeqNo: **3222392** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	2100	25						3.80	20	
Surr: BFB	4800		5000		96.8	70	130	0	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 range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2208426 RcptNo: 1

Received By: Tracy Casarrubias 8/6/2022 10:30:00 AM

Completed By: Tracy Casarrubias 8/6/2022 2:57:46 PM

Reviewed By: JR 8/8/22

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° 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: KRC 8.08.22

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	NA	Good	Yes			

Chain-of-Custody Record

Client: Harvest
Oakley Hayes
Mailing Address:

Phone #:
email or Fax#:
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Florance GC J16A
Project #:
Project Manager: Danny Burns
Sampler: DB
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): N/A (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2208426	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8-5-22	1620	Air	Influent Zone 02	1-Tedlar	—	001	X	X								

Date: 8-5-22 Time: 1715 Relinquished by:
Received by: Via: Date: 8/5/22 Time: 1715

Date: 8/5/22 Time: 1747 Relinquished by:
Received by: Via: Date: 8/6/22 Time: 10:30

Remarks:
cc: dburns@ensolum.com
ecarroll@ensolum.com

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 03, 2022

Danny Burns

Harvest
1755 Arroyo Dr.
Bloomfield, NM 87413
TEL: (505) 632-4475
FAX

RE: Florance GC J 16A OrderNo.: 2209B55

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/22/2022 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 Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209B55**
Date Reported: **10/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent- Zone 04
Project: Florance GC J 16A
Collection Date: 9/21/2022 12:50:00 PM
Lab ID: 2209B55-001 **Matrix:** AIR
Received Date: 9/22/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	350	5.0		µg/L	1	9/26/2022 4:42:00 PM	G91308
Surr: BFB	91.1	70-130		%Rec	1	9/26/2022 4:42:00 PM	G91308
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	0.10	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Toluene	0.36	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Ethylbenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2,4-Trimethylbenzene	0.10	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,3,5-Trimethylbenzene	0.24	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Naphthalene	ND	0.20		µg/L	1	9/26/2022 4:42:00 PM	R91308
1-Methylnaphthalene	ND	0.40		µg/L	1	9/26/2022 4:42:00 PM	R91308
2-Methylnaphthalene	ND	0.40		µg/L	1	9/26/2022 4:42:00 PM	R91308
Acetone	ND	1.0		µg/L	1	9/26/2022 4:42:00 PM	R91308
Bromobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Bromodichloromethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Bromoform	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Bromomethane	ND	0.20		µg/L	1	9/26/2022 4:42:00 PM	R91308
2-Butanone	ND	1.0		µg/L	1	9/26/2022 4:42:00 PM	R91308
Carbon disulfide	ND	1.0		µg/L	1	9/26/2022 4:42:00 PM	R91308
Carbon tetrachloride	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Chlorobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Chloroethane	ND	0.20		µg/L	1	9/26/2022 4:42:00 PM	R91308
Chloroform	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Chloromethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
2-Chlorotoluene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
4-Chlorotoluene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
cis-1,2-DCE	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/26/2022 4:42:00 PM	R91308
Dibromochloromethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Dibromomethane	ND	0.20		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1-Dichloroethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1-Dichloroethene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308

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
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2209B55**
Date Reported: **10/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent- Zone 04
Project: Florance GC J 16A
Collection Date: 9/21/2022 12:50:00 PM
Lab ID: 2209B55-001 **Matrix:** AIR
Received Date: 9/22/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,3-Dichloropropane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
2,2-Dichloropropane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1-Dichloropropene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Hexachlorobutadiene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
2-Hexanone	ND	1.0		µg/L	1	9/26/2022 4:42:00 PM	R91308
Isopropylbenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
4-Isopropyltoluene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/26/2022 4:42:00 PM	R91308
Methylene chloride	ND	0.30		µg/L	1	9/26/2022 4:42:00 PM	R91308
n-Butylbenzene	ND	0.30		µg/L	1	9/26/2022 4:42:00 PM	R91308
n-Propylbenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
sec-Butylbenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Styrene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
tert-Butylbenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
trans-1,2-DCE	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Trichlorofluoromethane	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/26/2022 4:42:00 PM	R91308
Vinyl chloride	ND	0.10		µg/L	1	9/26/2022 4:42:00 PM	R91308
Xylenes, Total	1.2	0.15		µg/L	1	9/26/2022 4:42:00 PM	R91308
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	9/26/2022 4:42:00 PM	R91308
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	1	9/26/2022 4:42:00 PM	R91308
Surr: Toluene-d8	108	70-130		%Rec	1	9/26/2022 4:42:00 PM	R91308
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	9/26/2022 4:42:00 PM	R91308

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	Estimated value
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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ANALYTICAL SUMMARY REPORT

September 28, 2022

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: B22092225

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 9/23/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B22092225-001	2209B55-001B, Influent Zone 04	09/21/22 12:50	09/23/22	Gas	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond,/1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B22092225-001
Client Sample ID: 2209B55-001B, Influent Zone 04

Report Date: 09/28/22
Collection Date: 09/21/22 12:50
DateReceived: 09/23/22
Matrix: Gas

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.42	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Nitrogen	78.07	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Carbon Dioxide	0.51	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	09/28/22 13:04 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/28/22 13:04 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-95	09/28/22 13:04 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-95	09/28/22 13:04 / jrj
Pseudo-critical Pressure, psia	547			1		GPA 2261-95	09/28/22 13:04 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	09/28/22 13:04 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	09/28/22 13:04 / jrj
Air, %	97.85			0.01		GPA 2261-95	09/28/22 13:04 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	09/28/22 13:04 / jrj

- BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.
- GPM = gallons of liquid at standard conditions per 1000 cu. ft. of moisture free gas @ standard conditions.
- To convert BTU to a water-saturated basis @ standard conditions, multiply by 0.9825.
- Standard conditions: 60 F & 14.73 psi on a dry basis.

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B22092225 **Report Date:** 09/28/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261-95**										Batch: R388695
Lab ID: **B22091873-001ADUP**	12	Sample Duplicate				Run: GCNGA-B_220928A				09/28/22 11:20
Oxygen		21.5	Mol %	0.01				0	20	
Nitrogen		78.1	Mol %	0.01				0	20	
Carbon Dioxide		0.43	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		<0.01	Mol %	0.01					20	
Lab ID: **B22092354-001ADUP**	12	Sample Duplicate				Run: GCNGA-B_220928A				09/28/22 12:39
Oxygen		20.6	Mol %	0.01				0	20	
Nitrogen		78.2	Mol %	0.01				0.0	20	
Carbon Dioxide		1.00	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		0.20	Mol %	0.01				4.9	20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		<0.01	Mol %	0.01					20	
Lab ID: **LCS092822**	11	Laboratory Control Sample				Run: GCNGA-B_220928A				09/28/22 15:29
Oxygen		0.61	Mol %	0.01	122	70	130			
Nitrogen		6.08	Mol %	0.01	101	70	130			
Carbon Dioxide		1.00	Mol %	0.01	101	70	130			
Methane		74.4	Mol %	0.01	100	70	130			
Ethane		6.04	Mol %	0.01	101	70	130			
Propane		5.07	Mol %	0.01	103	70	130			
Isobutane		1.99	Mol %	0.01	99	70	130			
n-Butane		1.98	Mol %	0.01	99	70	130			
Isopentane		1.00	Mol %	0.01	100	70	130			
n-Pentane		1.01	Mol %	0.01	101	70	130			
Hexanes plus		0.79	Mol %	0.01	99	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

ENERGY LABORATORIES
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Work Order Receipt Checklist

Hall Environmental

B22092225

Login completed by: Leslie S. Cadreau
Date Received: 9/23/2022

Reviewed by:
Received by: yes

Reviewed Date:
Carrier name: Return-FedEx NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	18.2°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

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

SUB CONTRACTOR: Energy Labs -Billings	COMPANY: Energy Laboratories	PHONE: (406) 869-6253	FAX: (406) 252-6069
ADDRESS: 1120 South 27th Street		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: Billings, MT 59107			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2209855-0018	Influent ~~091522~~	TEDLAR	Air	9/21/2022 12:50:00 PM	1	Natural Gases O2, CO2

B22092225

Zone 04 KPA 9.22.22

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By: CMC	Date: 9/22/2022	Time: 8:30 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: Yvonna Sutton	Date: 9/23/22	Time: 0910

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples ____ °C Attempt to Cool? ____
Comments: ____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **2209B55** RcptNo: **1**

Received By: **Juan Rojas** **9/22/2022 7:10:00 AM**

Completed By: **Cheyenne Cason** **9/22/2022 8:25:11 AM**

Reviewed By: JN 9/22/22

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° 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: KPG 9-22-22

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	NA	Good	Yes			

Chain-of-Custody Record

Client: Harvest Midstream

Attn: Oakley Hayes

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
5-Day
☒ Standard ☐ Rush

Project Name:
Florance GC J 16A

Project #:

Project Manager:
D. Burns

Sampler: DB/HN

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): N/A (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209855	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Fixed Gas CO_2 & O_2					
9-21-22	1250	Air	Influent - Zone 04	2-Tedlar	—	001	X	X						X			X					

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9-21-22	1410	D. Burns	Chris Waller		9/21/22	1410
9/21/22	1756	Chris Waller		courier	9/22/22	7:10

Remarks:
cc: dburns ecarroll @ ensolum.com
bherb

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.

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 154973

CONDITIONS

Operator:	OGRID:
Harvest Four Corners, LLC 1111 Travis Street Houston, TX 77002	373888
	Action Number: 154973
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	1. Continue as stated within section 6.0 (includes 6.1 & 6.2) of report. 2. Submit fourth quarter 2022 report by January 31, 2023. 3. OCD grants Harvest bi-annual reporting starting with 1st half of 2023. 4. Submit first bi-annual report by July 31, 2023.	11/29/2022