

REVIEWED

By NVelez at 3:13 pm, Aug 18, 2025



1. Continue monthly O&M schedule as stated in the system adjustments and recommendations section of report.
2. Submit next quarterly report by October 15, 2025.

July 15, 2025

New Mexico Oil Conservation Division

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

Re: Second Quarter 2025 – Solar SVE System Update

James Ranch Unit #10 Battery
Eddy County, New Mexico
XTO Energy, Inc.
NMOCD Incident Numbers NAB1535754357, NAB1521257588, and NAB1904653072

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), presents this *Second Quarter 2025 - Solar SVE System Update* report summarizing the solar soil vapor extraction (SVE) system performance at the James Ranch Unit #10 Battery (Site), located in Unit H, Section 1, Township 23 South, Range 30 East in Eddy County, New Mexico (Figure 1). The SVE system has operated since May 27, 2022, to remediate residual subsurface soil impacts at the Site. This report summarizes Site activities performed in April, May, and June of 2025 for the New Mexico Oil Conservation Division (NMOCD).

SVE SYSTEM SPECIFICATIONS

A VariSun Direct Solar SVE system is installed at the Site and consists of a 6.2 horsepower (HP) Pentair SST65 high efficiency regenerative blower capable of producing 250 cubic feet per minute (cfm) flow and a vacuum of 110 inches of water column (IWC). The system is powered by 12, 415-watt solar modules capable of producing 5 kilowatts (KW) of electricity. A motor controller automatically starts the system as soon as sunlight is available and increases the electrical output to the blower as solar power increases throughout the day.

Ten SVE wells (SVE01 through SVE06 and SVE-PT-01 through SVE-PT-04) are currently installed at the Site, as depicted on Figure 2. In order to target total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) soil impacts at different depth intervals, the screened intervals of the SVE wells were installed in shallow, medium, and deep zones. Specifically, SVE wells SVE01, SVE02, SVE03, and SVE04 target shallow zone impacts and are screened at depths between 5 feet and 20 feet below ground surface (bgs). SVE wells SVE-PT-02, SVE-PT-03, and SVE-PT-04 target medium zone impacts and are screened between 15 feet and 30 feet bgs. SVE wells SVE05, SVE06, and SVE-PT-01 target deep zone impacts and are screened at depths between 25 feet and 65 feet bgs.

SUMMARY OF SVE OPERATIONS

During the second quarter of 2025, Ensolum personnel performed routine operation and maintenance (O&M) visits to verify that the system was operating as designed and to perform any required maintenance. In accordance with the approved *Revised Remediation Work Plan – SVE System* prepared by LT Environmental, Inc. (LTE, dated October 30, 2019), O&M inspections were performed monthly this time period. Field notes taken during O&M visits are included as Appendix A.

On June 16, 2025, an O&M technician was driving by the Site and observed the SVE system disconnected from the anchors and flipped upside down, landing on the faces of the solar panels, likely due to recent high wind events. Upon further inspection, it was determined the existing system would no longer be operational without significant repairs and/or modifications to prevent similar incidents from occurring in the future. The SVE system was removed from the Site for storage at a nearby XTO yard. Photographs of the SVE system post-wind event are provided as Appendix B.

During April 2025, vapor extraction was applied to all SVE wells except for SVE03 and SVE06 (as recommended in the *Second Quarter 2023 - Solar SVE System Update*) to remove hydrocarbon impacts from the impacted zones at the Site. In May 2025, extraction well SVE02 was taken offline due to low photoionization detector (PID) readings at that location during recent O&M events.

Between March 12 and June 13, 2025, approximately 1,141 total hours of nominal daylight were available for the solar SVE system to operate. Available nominal daylight hours are based on estimates by the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS) for the Site location. Between these dates, the recorded runtime for the system based on the hour meter reading was 1,125.4 hours, equating to a runtime efficiency of 98.6 percent (%). All downtime was the result of system damage following the June storm event. Table 1 presents the SVE system runtime compared to nominal available daylight hours per month.

VAPOR SAMPLING RESULTS

A second quarter 2025 vapor sample was collected on June 13, 2025. The vapor sample was collected from a sample port located between the SVE piping manifold and the SVE blower using a high vacuum air sampler. Prior to collection, the vapor sample was field screened with a PID for organic vapor monitoring (OVM). The vapor sample was collected directly into two 1-Liter Tedlar® bags and submitted to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico for analysis of total volatile petroleum hydrocarbons (TVPH – also known as TPH – gasoline range organics (GRO)) and BTEX following Environmental Protection Agency (EPA) Method 8260C.

TVPH concentrations account for the majority contaminant mass and system emissions, with a result of 718 micrograms per liter (µg/L). In comparison, individual BTEX constituent concentrations ranged from below the laboratory reporting limits up to 38.8 µg/L in the second quarter of 2025. Table 2 presents a summary of TVPH and BTEX analytical data collected during the sampling events, with the full laboratory analytical reports included in Appendix B.

Vapor sample data and measured stack flow rates are used to estimate total mass recovered and total emissions generated by the SVE system (Table 2). Based on these estimates, approximately 19,600 pounds (9.80 tons) of TVPH have been removed by the system to date.

SYSTEM ADJUSTMENTS AND RECOMMENDATIONS

Due to the recent wind event in June 2025 that damaged the solar-powered SVE system beyond immediate repair, XTO is considering potential actions to be taken at the Site including, but not limited to, conducting confirmation soil sampling to assess the efficacy of the system and for potential Site closure, reinstallation of a solar-powered SVE system with additional anchoring systems to prevent future damage, or an assessment of alternative techniques to remediate remaining Site impacts. XTO will update the NMOCD in the third quarter 2025 report of any actions taken between July and September 2025. Additionally, an *Updated Remediation Work Plan* will be submitted to the NMOCD for review and approval if an alternate remedial technology is proposed for the Site.

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

Sincerely,
Ensolum, LLC



Stuart Hyde, PG (Licensed in WY, TX & WA)
Senior Managing Geologist
(970) 903-1607
shyde@ensolum.com



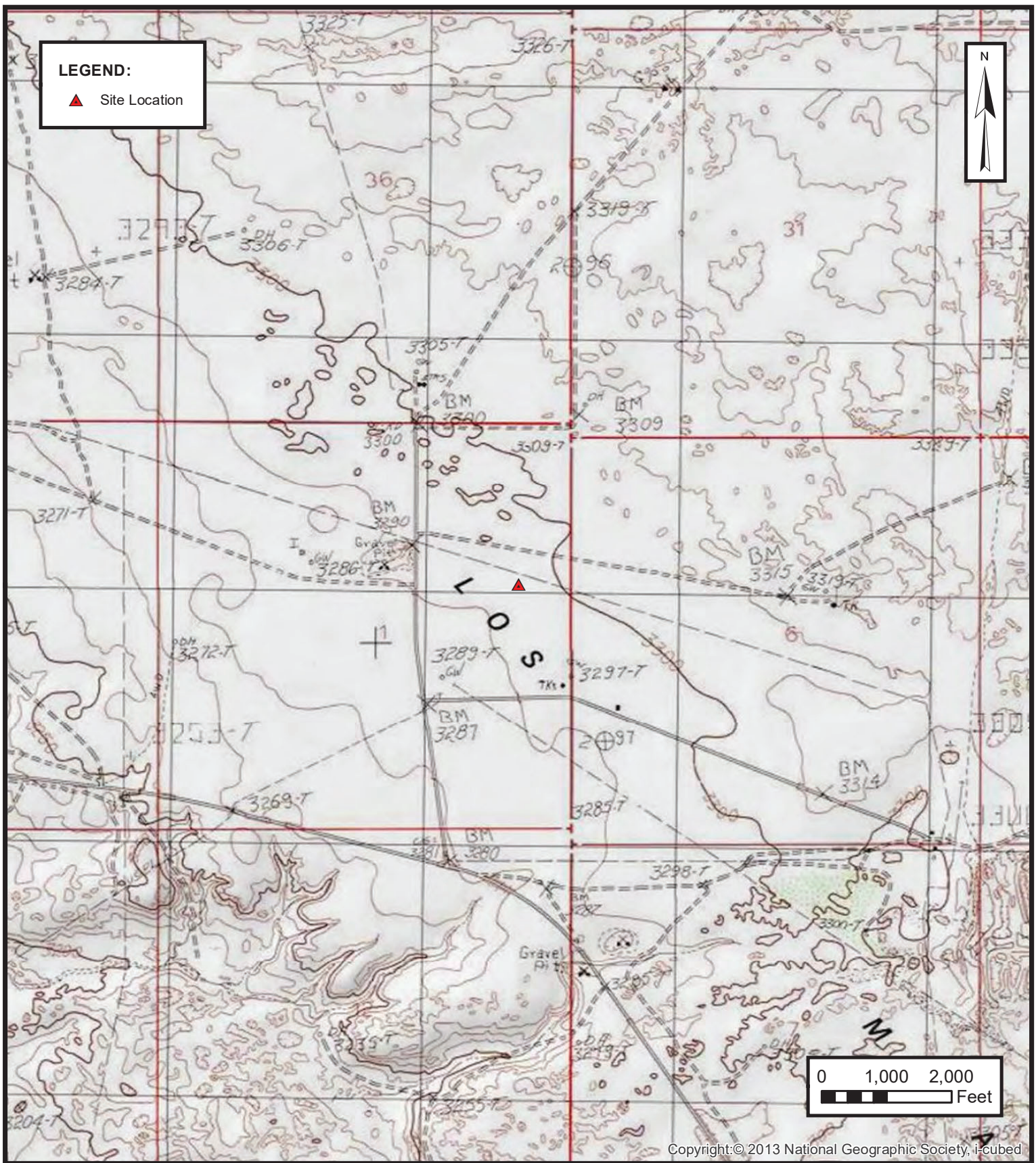
Daniel R. Moir, PG (Licensed in WY & TX)
Senior Managing Geologist
(303) 887-2946
dmoir@ensolum.com

Attachments:

Figure 1	Site Location Map
Figure 2	SVE System Configuration
Table 1	Soil Vapor Extraction System Runtime Calculations
Table 2	Soil Vapor Extraction System Mass Removal and Emissions
Appendix A	Field Notes
Appendix B	Project Photographs
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation



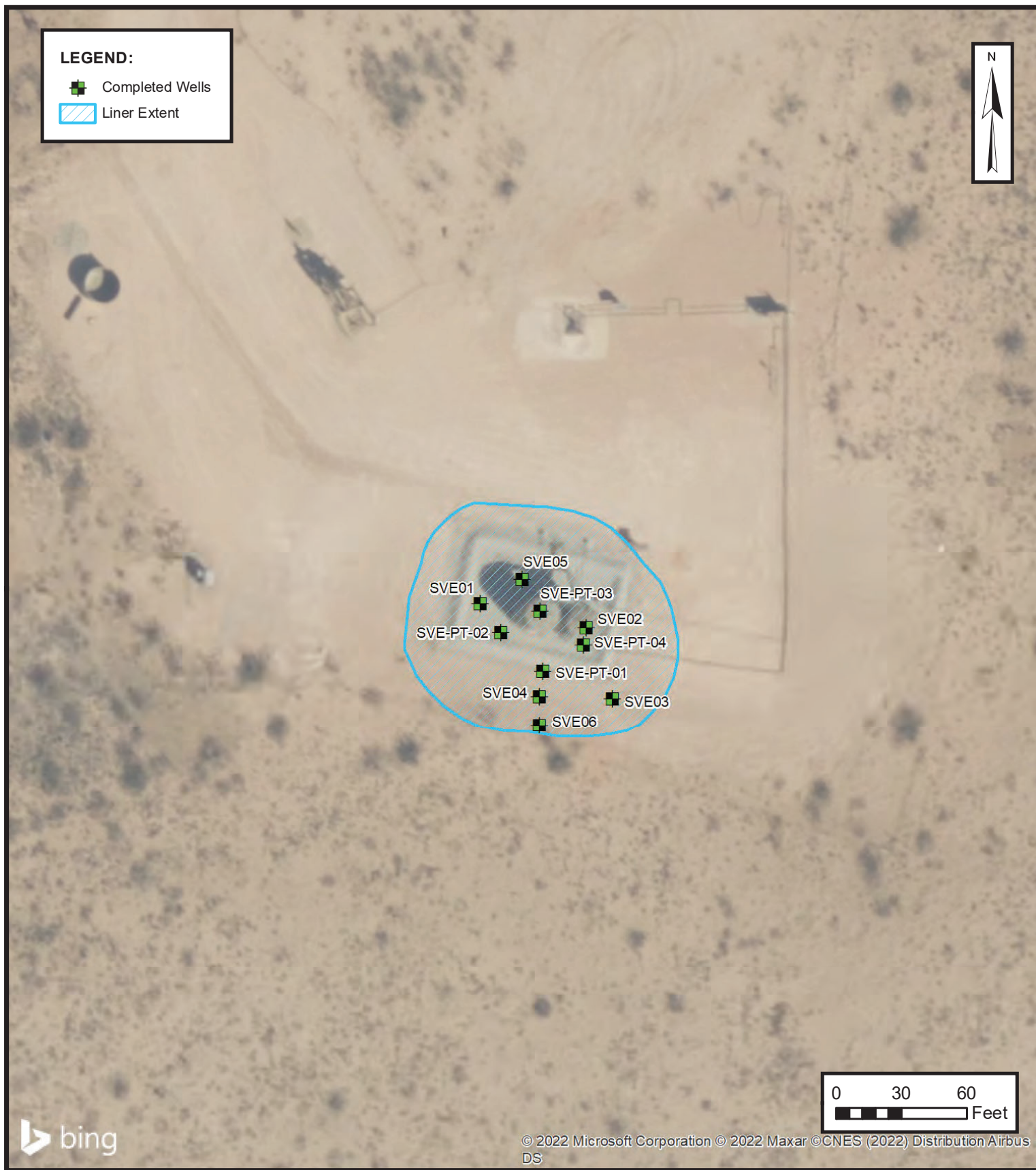
FIGURES

**SITE LOCATION MAP**

XTO ENERGY, INC
 JAMES RANCH UNIT #10 BATTERY
 Unit H, Sec 1, T23S, R30E
 Eddy County, New Mexico

FIGURE**1**

ENSOLUM
 Environmental & Hydrogeologic Consultants



SVE SYSTEM CONFIGURATION

XTO ENERGY, INC
JAMES RANCH UNIT #10 BATTERY
Unit H, Sec 1, T23S, R30E
Eddy County, New Mexico



TABLES



TABLE 1 SOIL VAPOR EXTRACTION SYSTEM RUNTIME CALCULATIONS

James Ranch Unit #10 Battery
XTO Energy
Eddy County, New Mexico

Date	Runtime Meter Hours	Delta Hours
3/12/2025	10,110.6	--
6/13/2025	11,236.0	1,125.4

Time Period	March 12 through March 31, 2025	April 1 through April 30, 2025	May 1 through May 30, 2025	June 1 through June 13, 2025
Days	19	30	30	13
Avg. Nominal Daylight Hours	11	12	13	14
Available Runtime Hours	209	360	390	182

Quarterly Available Daylight Runtime Hours **1,141**
Quarterly Runtime Hours **1,125.4**
Quarterly % Runtime **98.6%**

Month	Days	Nominal Daylight Hours	Total Month Hours
January	31	9	279
February	28	10	280
March	31	11	341
April	30	12	360
May	31	13	403
June	30	14	420
July	31	14	434
August	31	13	403
September	30	12	360
October	31	11	341
November	30	10	300
December	31	9	279



TABLE 2
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
James Ranch Unit #10 Battery
XTO Energy
Eddy County, New Mexico

Laboratory Analytical Results						
Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH (µg/L)
5/27/2022*	679	12.6	40.5	10.0	34.6	12,500
6/8/2022*	901	21.0	210	9.90	434	35,000
6/20/2022*	960	21.2	199	10	225	20,200
7/18/2022*	535	17.1	138	11.1	252	14,400
8/15/2022*	987	50.0	135	50.0	227	12,300
9/19/2022	380	10.0	54.9	10.0	110	4,830
12/19/2022	337	10.0	27.7	10.0	47.1	3,030
3/15/2023	245	10.0	25.2	10.0	29.4	1,630
6/14/2023	323	10.0	29.2	10.0	54.9	2,180
9/20/2023	611	10.0	43.4	10.0	106	5,210
12/14/2023	278	10.0	30.3	10.0	78.4	3,820
3/13/2024	358	10.0	29.0	10.0	80.8	2,900
7/2/2024	260	10.0	16.9	10.0	29.5	870
9/12/2024	391	10.0	17.4	10.0	36.7	841
12/11/2024	168	10.0	11.6	10.0	24.4	455
3/12/2025	235	10.0	10.0	10.0	23.0	378
6/13/2025	233	10.0	13.1	10.0	36.8	718
Average	464	14.2	61	12.4	108	7,133

Flow and Vapor Extraction Summary								
Date	Flow Rate (cfm) ⁽¹⁾	Total System Flow (cf)	Delta Flow (cf)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)
5/27/2022	140	0	--	--	--	--	--	--
6/8/2022	113	1,046,154	1,046,154	0.00710	0.0529	0.00421	0.0990	10.0
6/20/2022	105	2,047,854	1,001,700	0.00829	0.0803	0.00391	0.129	10.8
7/18/2022	70	3,572,454	1,524,600	0.00501	0.0441	0.00276	0.0624	4.53
8/15/2022	98	5,656,098	2,083,644	0.0123	0.0501	0.0112	0.0879	4.90
9/19/2022	138	8,742,054	3,085,956	0.0155	0.0490	0.0155	0.0870	4.42
12/19/2022	150	15,449,754	6,707,700	0.00561	0.0232	0.00561	0.0441	2.20
3/15/2023	141	21,230,472	5,780,718	0.00527	0.0139	0.00527	0.0202	1.23
6/14/2023	132	29,220,168	7,989,696	0.00494	0.0134	0.00494	0.0208	0.940
9/20/2023	132	38,728,920	9,508,752	0.00494	0.0179	0.00494	0.0397	1.82
12/14/2023	149	45,377,598	6,648,678	0.00557	0.0205	0.00557	0.0514	2.52
3/13/2024 ⁽²⁾	133	50,950,830	5,573,232	0.00497	0.0147	0.00497	0.0396	1.67
7/2/2024	146	62,898,594	11,947,764	0.00546	0.0125	0.00546	0.0301	1.03
9/12/2024	149	70,953,534	8,054,940	0.00557	0.0096	0.00557	0.0184	0.48
12/11/2024	162	78,914,214	7,960,680	0.00606	0.0088	0.00606	0.0185	0.39
3/12/2025	145	83,643,534	4,729,320	0.00542	0.0059	0.00542	0.0129	0.23
6/13/2025	158	94,312,326	10,668,792	0.00591	0.0068	0.00591	0.0177	0.32
Average				0.00675	0.0265	0.00608	0.0487	2.97

Mass Removal and Emissions Summary								
Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
5/27/2022	0	0	--	--	--	--	--	--
6/8/2022	154	154	1.10	8.17	0.649	15.3	1,549	0.774
6/20/2022	313	159	1.32	12.8	0.621	20.6	1,723	0.862
7/18/2022	676	363	1.82	16.0	1.00	22.7	1,644	0.822
8/15/2022	1,030	354	4.36	17.7	3.97	31.1	1,734	0.867
9/19/2022	1,403	373	5.77	18.3	5.77	32.4	1,648	0.824
12/19/2022	2,148	745	4.18	17.3	4.18	32.8	1,643	0.822
3/15/2023	2,832	683	3.60	9.5	3.60	13.8	840	0.420
6/14/2023	3,840	1,009	4.98	13.5	4.98	21.0	949	0.474
9/20/2023	5,041	1,201	5.93	21.5	5.93	47.7	2,190	1.10
12/14/2023	5,785	744	4.14	15.3	4.14	38.2	1,871	0.936
3/13/2024	6,483	698	3.47	10.3	3.47	27.7	1,167	0.584
7/2/2024	7,847	1,364	7.45	17.1	7.45	41.1	1,404	0.702
9/12/2024	8,748	901	5.02	8.6	5.02	16.6	430	0.215
12/11/2024	9,567	819	4.96	7.2	4.96	15.2	322	0.161
3/12/2025	10,111	544	2.95	3.2	2.95	7.0	123	0.061
6/13/2025	11,236	1,125	6.65	7.7	6.65	19.9	364	0.182
Total Mass Recovery to Date			67.7	204.1	65.4	403	19,600	9.80

Notes:

(1): average flow calculated from telemetry data beginning 9/21/2023

(2): flow rate for 3/13/2024 calcs based on January and February telemetry plus March site visit due to telemetry issues

cf: cubic feet

cfm: cubic feet per minute

µg/L: micrograms per liter

lb/hr: pounds per hour

--: not sampled

PID: photoionization detector

ppm: parts per million

SVE: soil vapor extraction

TVPH: total volatile petroleum hydrocarbons

gray: laboratory reporting limit used for calculating emissions

*: analytical results differ from those reported in the August 23, 2022 "Solar SVE System Update" due to unit conversion errors



APPENDIX A

Field Notes

4-16-25

Site log:
14:00 on site Sunny light wind 95°F

Main Vac 30 inH₂O
Runtime 10,536 hr
Flow 121.4 cfm

Wells:	(inH ₂ O)
02	22
PT04	24
PT01	20
03 -	N/A valve closed
05	24
PT03	21
01	23
04	23
06	N/A valve closed
PT02	25

16:30
off site

[Signature]

Location JRV 10 SUE Date 5-16-23 23
 Project / Client XTO

CW

9:30 on site + JSA, System running, sunny
 closing SVE02
 KO tank $\frac{1}{4}$ full

10:00 collect readings

Runtime 10,899 hr

Main Vac 40 (in H₂O)

Flow 131.8 (cfm)

Wells (in H₂O)

02 N/A closed

PT04 32

PT01 29

03 N/A closed

05 30

PT03 29

01 30

04 30

06 N/A closed

PT02 32

10:30 off site

[Signature]

Rite in the Rain

11:30 on site Sunny 97°F system running, KO tank Dry

Man Vae: 36 (in H₂O) ← [~40 expected in full sunlight]

Run time: 11,236 (hr.)

Flow: 124 (cfm) (PID ppm)

Affluent all wells: 96.9

Influent all wells: 233.3 Sample collected 11:55 am

Wells	(PID ppm)	(in H ₂ O)	2 x 1L Tedlar bags
02	Valve closed	—	
PT04	276	30	
PT01	2,338	28	
03	Valve closed	—	
05	419	28	
PT03	328	26	
01	113	26	
04	77.9	27	
06	Valve closed	—	
PT02	72.9	30	

12:15 photographed damage to solar panels

12:30 offsite to turn in samples to correlative.

CH



APPENDIX B

Project Photographs

PROJECT PHOTOGRAPHS
James Ranch Unit #10 Battery
Eddy County, New Mexico
Hilcorp Energy Company

Photograph 1

SVE System Post-Storm
June 16, 2025 at 9:56 AM

Date & Time: Mon, Jun 16, 2025 at 09:56:31 MDT
Position: +032.335605° / -103.827562° (±23.2ft)
Altitude: 3299ft (±9.8ft)
Datum: WGS-84
Azimuth/Bearing: 184° S04W 3271mils True (±15°)
Elevation Angle: -01.8°
Horizon Angle: +00.8°
Zoom: 1.0X
JRU 10

**Photograph 2**

SVE System Post-Storm
June 16, 2025 at 9:54 AM

Date & Time: Mon, Jun 16, 2025 at 09:54:30 MDT
Position: +032.335451° / -103.827633° (±25.2ft)
Altitude: 3302ft (±9.8ft)
Datum: WGS-84
Azimuth/Bearing: 041° N41E 0729mils True (±13°)
Elevation Angle: -05.8°
Horizon Angle: -01.9°
Zoom: 1.0X
JRU 10





APPENDIX C

Laboratory Analytical Reports & Chain-of-Custody Documentation



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

12

13

14

ANALYTICAL REPORT

PREPARED FOR

Attn: Stuart Hyde

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 6/16/2025 7:28:25 PM

JOB DESCRIPTION

James Ranch Unit #10 03C1558041

Rural Eddy, NM

JOB NUMBER

890-8291-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/16/2025 7:28:25 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Laboratory Job ID: 890-8291-1
SDG: Rural Eddy, NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Method Summary	13
Sample Summary	14
Chain of Custody	15
Receipt Checklists	16

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1

Job ID: 890-8291-1Eurofins Carlsbad

Job Narrative
890-8291-1

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

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

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

Receipt

The sample was received on 6/13/2025 1:02 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice.

Gasoline Range Organics

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

GC/MS VOA

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

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Client Sample ID: INFLUENT ALL WELLS
Date Collected: 06/13/25 11:55
Date Received: 06/13/25 13:02
Sample Container: Tedlar Bag 1L

Lab Sample ID: 890-8291-1
Matrix: Air

Method: SW846 8260C GRO - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics	716000		50000	ug/m3	-		06/14/25 16:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		60 - 140				06/14/25 16:16	1	

Method: SW846 8260C - Volatile Organic Compounds (GCMS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<10000	U	10000	ug/m3	-		06/14/25 15:27	1	
Toluene	13100		10000	ug/m3			06/14/25 15:27	1	
Ethylbenzene	<10000	U	10000	ug/m3			06/14/25 15:27	1	
m,p-Xylenes	35600		20000	ug/m3			06/14/25 15:27	1	
o-Xylene	<10000	U	10000	ug/m3			06/14/25 15:27	1	
Xylenes, Total	35600		20000	ug/m3			06/14/25 15:27	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		70 - 135				06/14/25 15:27	1	

Surrogate Summary

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Method: 8260C - Volatile Organic Compounds (GCMS)

Matrix: Air

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (70-135)
890-8291-1	INFLUENT ALL WELLS	102
LCS 860-242513/3	Lab Control Sample	99
LCSD 860-242513/4	Lab Control Sample Dup	99
MB 860-242513/6	Method Blank	95
Surrogate Legend		
BFB = 4-Bromofluorobenzene (Surr)		

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

Matrix: Air

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (60-140)
890-8291-1	INFLUENT ALL WELLS	104
LCS 860-242493/1010	Lab Control Sample	102
LCSD 860-242493/11	Lab Control Sample Dup	101
MB 860-242493/13	Method Blank	98
Surrogate Legend		
BFB = 4-Bromofluorobenzene (Surr)		

QC Sample Results

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Method: 8260C - Volatile Organic Compounds (GCMS)

Lab Sample ID: MB 860-242513/6

Matrix: Air

Analysis Batch: 242513

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10000	U	10000	ug/m3			06/14/25 15:03	1
Toluene	<10000	U	10000	ug/m3			06/14/25 15:03	1
Ethylbenzene	<10000	U	10000	ug/m3			06/14/25 15:03	1
m,p-Xylenes	<20000	U	20000	ug/m3			06/14/25 15:03	1
o-Xylene	<10000	U	10000	ug/m3			06/14/25 15:03	1
Xylenes, Total	<20000	U	20000	ug/m3			06/14/25 15:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 135		06/14/25 15:03	1

Lab Sample ID: LCS 860-242513/3

Matrix: Air

Analysis Batch: 242513

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50000	41060		ug/m3		82	70 - 125
Toluene	50000	49090		ug/m3		98	70 - 125
Ethylbenzene	50000	51300		ug/m3		103	70 - 125
m,p-Xylenes	50000	52300		ug/m3		105	70 - 125
o-Xylene	50000	52280		ug/m3		105	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 135

Lab Sample ID: LCSD 860-242513/4

Matrix: Air

Analysis Batch: 242513

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	50000	42120		ug/m3		84	70 - 125	3	35
Toluene	50000	50150		ug/m3		100	70 - 125	2	35
Ethylbenzene	50000	52580		ug/m3		105	70 - 125	2	35
m,p-Xylenes	50000	52810		ug/m3		106	70 - 125	1	35
o-Xylene	50000	52700		ug/m3		105	70 - 125	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 135

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

Lab Sample ID: MB 860-242493/13

Matrix: Air

Analysis Batch: 242493

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50000	U	50000	ug/m3			06/14/25 15:53	1

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

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

Lab Sample ID: MB 860-242493/13

Matrix: Air

Analysis Batch: 242493

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	98		60 - 140		06/14/25 15:53	1			

Lab Sample ID: LCS 860-242493/1010

Matrix: Air

Analysis Batch: 242493

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics			500000	523700		ug/m3		105	57 - 134		
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	102		60 - 140								

Lab Sample ID: LCSD 860-242493/11

Matrix: Air

Analysis Batch: 242493

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics			500000	552800		ug/m3		111	57 - 134	5	35	
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	101		60 - 140									

QC Association Summary

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

GC/MS VOA

Analysis Batch: 242493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8291-1	INFLUENT ALL WELLS	Total/NA	Air	8260C GRO	
MB 860-242493/13	Method Blank	Total/NA	Air	8260C GRO	
LCS 860-242493/1010	Lab Control Sample	Total/NA	Air	8260C GRO	
LCSD 860-242493/11	Lab Control Sample Dup	Total/NA	Air	8260C GRO	

Analysis Batch: 242513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8291-1	INFLUENT ALL WELLS	Total/NA	Air	8260C	
MB 860-242513/6	Method Blank	Total/NA	Air	8260C	
LCS 860-242513/3	Lab Control Sample	Total/NA	Air	8260C	
LCSD 860-242513/4	Lab Control Sample Dup	Total/NA	Air	8260C	



Lab Chronicle

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Client Sample ID: INFLUENT ALL WELLS
Date Collected: 06/13/25 11:55
Date Received: 06/13/25 13:02

Lab Sample ID: 890-8291-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	242513	06/14/25 15:27	KLV	EET HOU
Total/NA	Analysis	8260C GRO		1	5 mL	5 mL	242493	06/14/25 16:16	KLV	EET HOU

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Accreditation/Certification Summary

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260C		Air	Benzene
8260C		Air	Ethylbenzene
8260C		Air	m,p-Xylenes
8260C		Air	o-Xylene
8260C		Air	Toluene
8260C		Air	Xylenes, Total
8260C GRO		Air	Gasoline Range Organics

Method Summary

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GCMS)	SW846	EET HOU
8260C GRO	Volatile Organic Compounds (GC/MS)	SW846	EET HOU
5030C	Collection/Prep Tedlar Bag (P&T)	SW846	EET HOU

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Sample Summary

Client: Ensolum
Project/Site: James Ranch Unit #10 03C1558041

Job ID: 890-8291-1
SDG: Rural Eddy, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-8291-1	INFLUENT ALL WELLS	Air	06/13/25 11:55	06/13/25 13:02

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



AIR SAMPLING CHAIN OF CUSTODY

Xenco Job #:

Stafford, Texas (281-240-4200)

San Antonio, Texas (210-509-3334)

Phoenix, Arizona (480-355-0900)

Dallas, Texas (214-902-0300)


Lubbock, TX (806-794-1296)

Midland, TX (432-704-5251)

El Paso, TX (915-585-3443)

Setting the Standard since 1990

Page 1 of 1

Client/Project Information						AIR TYPE	Sampling Equipment Information						Analysis Requested				Remarks																
Company Name: Ensolum	Project Contact: Stuart Hyde	Email: shyde@ensolum.com	Ph.No.: 337-257-8307	Project Name & No.: James Ranch Unit #10, 03C1558041	Site Location: Rural Eddy, NM	Cost Center: 1135831001 AFE: EW.2019.03368.EXP.01	Sampler(s):	I = Indoor Vapor A = Ambient SV = Soil	Canister ID	Flow Regulator ID	Canister Pressure in field ("Hg) Start	Canister Pressure in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	TVPH(8015)	BTEX(8021)																		
Lab #	Field ID/Point of Collection	Start Date	Start Time	Stop Date	Stop Time																												
	Influent All Wells	6-13-25	11:55	6-13-25	11:55			SV						X	X																		
<div style="text-align: center;"> 890-8291 Chain of Custody</div>																																	
(1) Relinquished By:		Date/Time		(1) Received By:		Requested TAT						Shipping Information																					
6/13		13:02		[Signature]		<input checked="" type="checkbox"/> Contract TAT <input type="checkbox"/> 3 Day <input type="checkbox"/> Same Day						<input type="checkbox"/> FedEx <input type="checkbox"/> Other:																					
(2) Relinquished By:		Date/Time		(2) Received By:		<input type="checkbox"/> 7 Day <input type="checkbox"/> 2 Day Need By:						<input type="checkbox"/> UPS Tracking No.:																					
						<input type="checkbox"/> 5 Day <input type="checkbox"/> 1 Day						<input type="checkbox"/> LSO																					
(3) Relinquished By:		Date/Time		(3) Received By:		Special Requests/Instructions: Collected 2-1 Liter Tedlar bags.																											
(4) Relinquished By:		Date/Time		(4) Received By:		Bill to: Amy Ruth, XTO Energy, Inc., Address: 3104 E. Green St. Carlsbad, NM																											

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-8291-1

SDG Number: Rural Eddy, NM

Login Number: 8291

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-8291-1

SDG Number: Rural Eddy, NM

Login Number: 8291

List Number: 2

Creator: Grandits, Corey

List Source: Eurofins Houston

List Creation: 06/14/25 10:37 AM

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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 487023

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 487023
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
nvelez	1. Continue monthly O&M schedule as stated in the system adjustments and recommendations section of report. 2. Submit next quarterly report by October 15, 2025.	8/18/2025