



April 13, 2020

Targa Resources Partners LP  
811 Louisiana Street, Suite 2100  
Houston, Texas 77002  
Attn: Ms. Christina Higginbotham, P.G.

**Re: 1RP-877 Eunice Gathering System**  
**Targa Midstream Services LLC**  
**32.49361 -103.1436, Section 10, Township 21S, Range 37E**  
Ensolum Project No. 01C1136021

Ms. Higginbotham:

Per your request, this letter provides a summary of the scope, investigation activities and results for the project referred to as 1RP-877 Eunice Gathering System, referred to hereinafter as the "Site". Targa Resource Partners LP (Targa) requested Ensolum, LLC (Ensolum) to conduct an assessment of a historical release on the 12-inch gathering pipeline.

### **Background**

In March 2006, a release was discovered on the Targa 12-inch gas gathering pipeline when a producer filled the pipeline with crude oil. Approximately 10 barrels was lost to the ground surface. A vacuum truck recovered two (2) barrels. Based on the New Mexico Oil Conservation Division (NMOCD) Initial C-141 (Attachment A), the landowner informed Targa that his own environmental company would perform the work.

The Initial C-141 was the only historical information that could be located for the release.

### **Setting**

The Site is located in Lea County, north of the city of Eunice, New Mexico, specifically at the coordinates 32.49361, -103.1436. The Site and surrounding area are comprised of native rangeland with oil and gas pipelines and production facilities in the area. The location appeared to have been disturbed at some point in the past.

### **Site Activities**

On June 19, 2019, Ensolum mobilized to the Site with a backhoe to vertically investigate the historical release. The backhoe advanced a trench down to approximately 15 feet below ground surface (bgs) in the immediate vicinity of latitude 32.49361, longitude -103.1436. Two (2) discrete soil samples were collected from the following intervals: 1) 2-3 feet bgs, and 2) 14-15 feet bgs. The soil samples were analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) utilizing Environmental Protection Agency (EPA) Method SW-846 #8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0

A Site Map (Figure 1) is provided in Attachment B with the trench location. Photographic documentation is also provided as Attachment C.

All soil samples were collected in laboratory supplied glass containers, immediately cooled to approximately 4° C, transported under proper chain-of-custody procedures and documentation and submitted to Xenco laboratory in Midland, Texas.

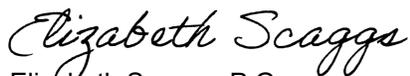
**Laboratory sample results indicated concentrations of BTEX and TPH were non detected above the sample detection limits.** Chloride concentrations were 32.5 milligrams per kilogram (mg/kg) and 564 mg/kg at 2-3 feet bgs and 14-15 feet bgs, respectively.

A summary of soil analytical results is provided in Table 1 – Soil Sample Analytical Results in Attachment D. Laboratory analytical reports are provided as Attachment E.

**Based on the completed on-Site assessment and historical information, Ensolum recommends that no further assessment or remediation is warranted and that the attached Final C-141 be submitted to the NMOCD.**

If you have any questions about this letter or require anything further, please feel free to contact the undersigned at (972) 364-7643.

Sincerely,  
Ensolum, LLC



Elizabeth Scaggs, P.G.  
Principal Geoscientist  
972.467.0838  
[lscaggs@ensolum.com](mailto:lscaggs@ensolum.com)

**Attachments:** **Attachment A:** Initial and Final C-141's  
**Attachment B:** Figure 1- Site Map  
**Attachment C:** Photographic Documentation  
**Attachment D:** Summary Soil Sample Analytical Results  
**Attachment E:** Laboratory Report and Chain of Custody Documentation

ATTACHMENT A

Final C-141  
Initial C-141

---

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**1RP-877**

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Targa Midstream Services, LLC	Contact: Cindy Klein
Address: 811 Louisiana St., Suite 2100	Telephone No. 575-631-7093
Facility Name: Eunice Gathering System	Facility Type: Gas Pipeline
Surface Owner: McNeil	Mineral Owner:
	API No.

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	10	21S	37E	2640	N/S	300	E	Lea

Latitude 32° 29' 37" N

Longitude 103° 08' 37" W

**NATURE OF RELEASE**

Type of Release: Crude Oil	Volume of Release: 10 Barrels	Volume Recovered: 2 Barrels
Source of Release: 12" Pipeline Failure	Date and Hour of Occurrence: 3/6/06 AM	Date and Hour of Discovery: 3/6/06 12:00 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Producer filled Targa Gas Pipeline with crude oil. Removed free oil with vacuum truck.

Describe Area Affected and Cleanup Action Taken.\*

Pipeline right of way. Landowner informed Targa he has an environmental company and contractor to facilitate cleanup and collect confirmation sample to achieve compliance with OCD Guidelines. Targa was not provided documentation at the time of the initial cleanup. In June 2019, the area was trenched to 15' at the approximate location of the release. No impact was observed and analytical confirmatory samples were below NMOCD criteria.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Cindy Klein</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Cindy Klein	Approved by <i>Bradford Billings</i>	
Title: Environmental Supervisor	Approval Date: 09/23/2020	Expiration Date:
E-mail Address: cklein@targaresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Phone 575-631-7093		

\* Attach Additional Sheets If Necessary

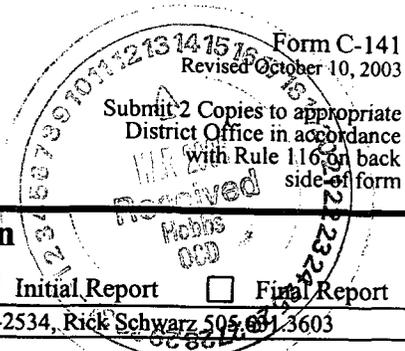
nPAC0613749058

**1RP-877**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505



**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: Targa Midstream Services L P	Contact: James Lingnau 505 394-2534, Rick Schwarz 505 631 3603
Address: PO Box 1909 Eunice, NM 88231	Telephone No. (505) 394-2534
Facility Name: Eunice Gathering System	Facility Type

Surface Owner: McNeil	Mineral Owner:	Lease No.
-----------------------	----------------	-----------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	10	21S	37E	2640	N/S	300	E	Lea

Latitude 32°29'37"N Longitude 103°08'37"W

*WTR 25'*

**NATURE OF RELEASE**

Type of Release: Crude Oil	Volume of Release: estimated at 10 barrels	Volume Recovered: 2 barrels
Source of Release: 12" Pipeline Failure	Date and Hour of Occurrence: 3/6/06 AM	Date and Hour of Discovery: 3/6/06 12:00 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken. \*  
Producer filled Targa Gas Pipeline with crude oil. Removed free oil with vacuum truck.

Describe Area Affected and Cleanup Action Taken.\*  
Pipeline right of way. Landowner informed Targa he has his own environmental company and he is going to oversee the cleanup. Targa will monitor for compliance with OCD Guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Cal Wrangham	Approved by District Supervisor:	
Title: ES&H Advisor	Approval Date:	Expiration Date:
E-mail Address: cwrangham@targaresources.com	Conditions of Approval:	
Date: 3/8/06 Phone: (432) 688-0542	Attached <input type="checkbox"/>	

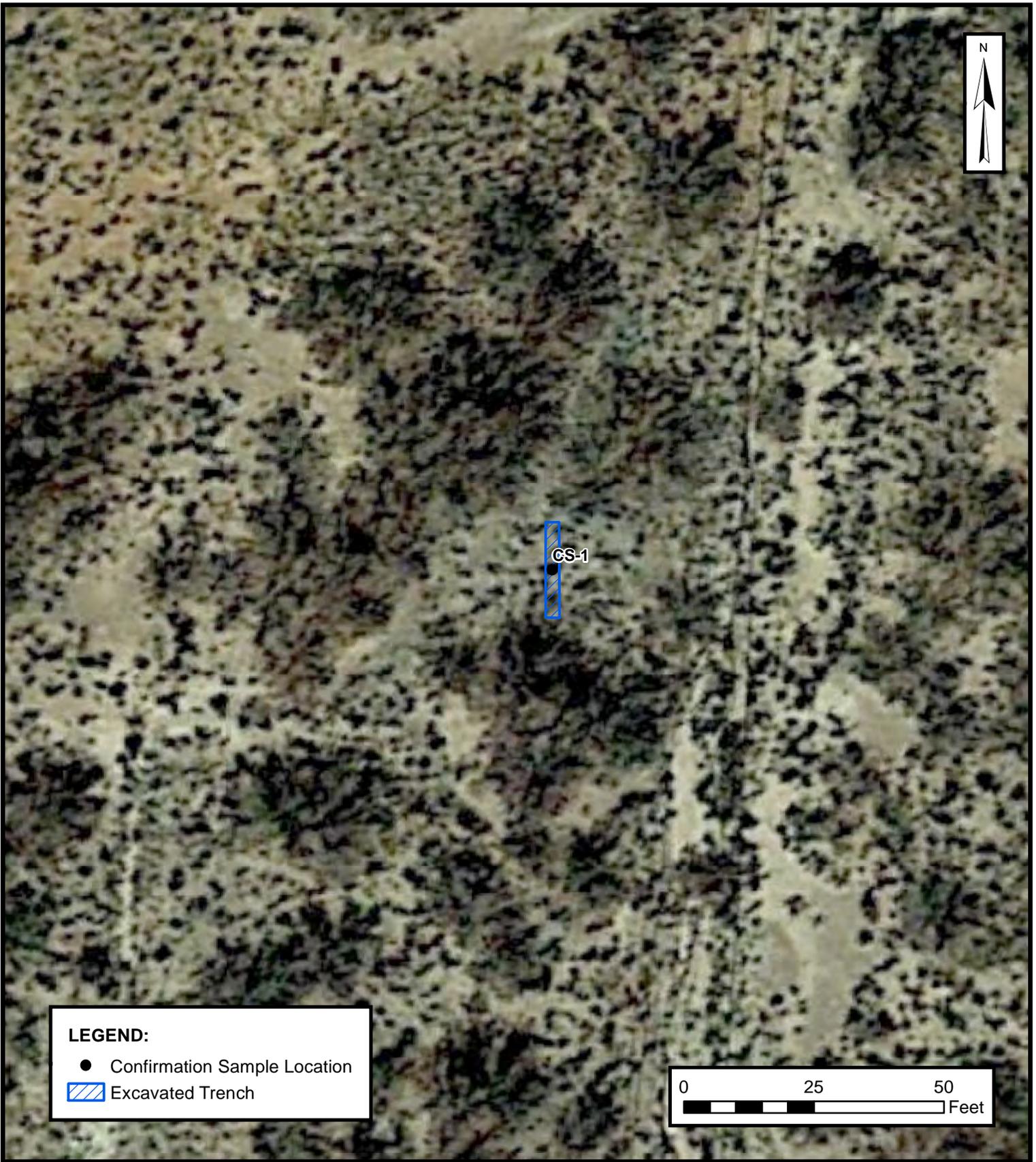
\* Attach Additional Sheets If Necessary

*incident - nPAC0613749058  
application - pPAC0613749269*

## ATTACHMENT B

Site Map

---



**SITE MAP**  
TARGA MIDSTREAM SERVICES LP  
EUNICE GATHERING SYSTEM, 1RP-877  
Lea County, New Mexico  
32.49361° N, 103.14360° W  
PROJECT NUMBER: 01C1136021

**FIGURE**  
**1**

ATTACHMENT C

Photographic Documentation

---



Looking south at the area of interest prior to beginning investigation activities.



Looking south as the backhoe breaks ground.



Looking southwest at the trench at approximately 10 feet bgs during investigation activities.



Looking directly into trench during investigation activities.



Looking west at west wall of trench, not dark area at 2-3 feet bgs.



Looking southeast at trenched area subsequent to backfilling.

## ATTACHMENT D

Table

---

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Targa Midstream Services, LLC - 1RP-877  
 Eunice Gathering System  
 Lea County, New Mexico

Ensolum Project No. 01C1136021

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
<b>New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (&lt;50 feet)</b>			10	NE	NE	NE	50	NE	NE	NE	100	600
<b>Confirmation Soil Sample Analytical Results</b>												
1RP877CS-1	6/19/2019	2 - 3	<0.000191	<0.000129	<0.0000950	<0.000228	<0.0000950	<7.98	<8.10	<8.10	<7.98	<b>32.5</b>
1RP877CS-2	6/19/2019	14 - 15	<0.000192	<0.000129	<0.0000953	<0.000361	<0.0000953	<8.00	<8.13	<8.13	<8.00	<b>564</b>

bgs: below ground surface

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

mg/kg: milligrams per kilogram

NE: Not Established

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon

ATTACHMENT E

Laboratory Analytical Reports &  
Chain-of-Custody Documentation

---

# Analytical Report 628481

for  
Ensolum

**Project Manager: Liz Scaggs**

**NMOCD Compliance**

**01C1136021**

**26-JUN-19**

Collected By: Client



**1211 W. Florida Ave  
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Atlanta (LELAP Lab ID #04176)  
Xenco-Tampa: Florida (E87429), North Carolina (483)

# Table of Contents

Cover Page	1
Cover Letter	3
Sample ID Cross Reference	4
Case Narrative	5
Certificate of Analysis (Detailed Report)	6
Explanation of Qualifiers (Flags)	12
SURR_QC_V62	13
LCS / LCSD Recoveries	16
MS / MSD Recoveries	18
Chain of Custody	20
IOS_COC_41894	21
IOS_Check_List_41894	22
Sample Receipt Conformance Report	23



26-JUN-19

Project Manager: **Liz Scaggs**

**Ensolum**

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: XENCO Report No(s): **628481**

**NMOCD Compliance**

Project Address: 1RP-877

**Liz Scaggs:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 628481. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 628481 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Kalei Stout**

Midland Laboratory Director

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



# Sample Cross Reference 628481



Ensolum, Dallas, TX

NMOCD Compliance

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
1RP877CS-1	S	06-19-19 11:35	2 - 3 ft	628481-001
1RP877CS-2	S	06-19-19 11:46	14 - 15 ft	628481-002



## CASE NARRATIVE

*Client Name: Ensolum*

*Project Name: NMOCD Compliance*

Project ID: 01C1136021  
Work Order Number(s): 628481

Report Date: 26-JUN-19  
Date Received: 06/20/2019

---

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

**Sample receipt non conformances and comments:**

None

---

**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3093520 Chloride by EPA 300

Lab Sample ID 628483-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 628481-001, -002.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



# Certificate of Analytical Results

## 628481



### Ensolum, Dallas, TX NMOCD Compliance

Sample Id: **IRP877CS-1**

Matrix: Soil

Sample Depth: 2 - 3 ft

Lab Sample Id: 628481-001

Date Collected: 06.19.19 11.35

Date Received: 06.20.19 11.53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3093520

Date Prep: 06.25.19 13.30

Prep seq: 7680688

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	32.5	5.00	0.858	mg/kg	06.25.19 18:58	X	1

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3093578

Date Prep: 06.25.19 12.00

Prep seq: 7680769

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<7.98	15.0	7.98	mg/kg	06.25.19 18:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<8.10	15.0	8.10	mg/kg	06.25.19 18:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.10	15.0	8.10	mg/kg	06.25.19 18:59	U	1
Total TPH	PHC635	<7.98		7.98	mg/kg	06.25.19 18:59	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	92	70 - 135	%		
o-Terphenyl	86	70 - 135	%		



# Certificate of Analytical Results

## 628481



### Ensolum, Dallas, TX

#### NMOCD Compliance

Sample Id: **IRP877CS-1**

Matrix: Soil

Sample Depth: 2 - 3 ft

Lab Sample Id: 628481-001

Date Collected: 06.19.19 11.35

Date Received: 06.20.19 11.53

Analytical Method: BTEX by SW 8260C

Prep Method: 5035A

Analyst: HOP

% Moist:

Tech: HOP

Seq Number: 3093378

Date Prep: 06.24.19 17.00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7680640

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000191	0.000994	0.000191	mg/kg	06.25.19 05:14	U	1
Toluene	108-88-3	<0.000129	0.000994	0.000129	mg/kg	06.25.19 05:14	U	1
Ethylbenzene	100-41-4	<0.0000950	0.000994	0.0000950	mg/kg	06.25.19 05:14	U	1
m,p-Xylenes	179601-23-1	<0.000360	0.00199	0.000360	mg/kg	06.25.19 05:14	U	1
o-Xylene	95-47-6	<0.000228	0.000994	0.000228	mg/kg	06.25.19 05:14	U	1
Total Xylenes	1330-20-7	<0.000228		0.000228	mg/kg	06.25.19 05:14	U	
Total BTEX		<0.0000950		0.0000950	mg/kg	06.25.19 05:14	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	103	74 - 126	%		
1,2-Dichloroethane-D4	103	80 - 120	%		
Toluene-D8	97	73 - 132	%		
4-Bromofluorobenzene	89	58 - 152	%		



# Certificate of Analytical Results

## 628481



### Ensolum, Dallas, TX NMOCD Compliance

Sample Id: **1RP877CS-2**

Matrix: Soil

Sample Depth: 14 - 15 ft

Lab Sample Id: 628481-002

Date Collected: 06.19.19 11.46

Date Received: 06.20.19 11.53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Analyst: CHE

% Moist:

Tech: CHE

Seq Number: 3093520

Date Prep: 06.25.19 13.30

Prep seq: 7680688

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	564	4.95	0.850	mg/kg	06.25.19 20:10		1

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3093578

Date Prep: 06.25.19 12.00

Prep seq: 7680769

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<8.00	15.0	8.00	mg/kg	06.25.19 19:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<8.13	15.0	8.13	mg/kg	06.25.19 19:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.13	15.0	8.13	mg/kg	06.25.19 19:25	U	1
Total TPH	PHC635	<8.00		8.00	mg/kg	06.25.19 19:25	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	98	70 - 135	%		
o-Terphenyl	80	70 - 135	%		



# Certificate of Analytical Results

## 628481



### Ensolum, Dallas, TX

#### NMOCD Compliance

Sample Id: **IRP877CS-2**

Matrix: Soil

Sample Depth: 14 - 15 ft

Lab Sample Id: 628481-002

Date Collected: 06.19.19 11.46

Date Received: 06.20.19 11.53

Analytical Method: BTEX by SW 8260C

Prep Method: 5035A

Analyst: HOP

% Moist:

Tech: HOP

Seq Number: 3093378

Date Prep: 06.24.19 17.00

Subcontractor: SUB: T104704215-19-29

Prep seq: 7680640

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000192	0.000998	0.000192	mg/kg	06.25.19 04:55	U	1
Toluene	108-88-3	<0.000129	0.000998	0.000129	mg/kg	06.25.19 04:55	U	1
Ethylbenzene	100-41-4	<0.0000953	0.000998	0.0000953	mg/kg	06.25.19 04:55	U	1
m,p-Xylenes	179601-23-1	<0.000361	0.00200	0.000361	mg/kg	06.25.19 04:55	U	1
o-Xylene	95-47-6	<0.000229	0.000998	0.000229	mg/kg	06.25.19 04:55	U	1
Total Xylenes	1330-20-7	<0.000229		0.000229	mg/kg	06.25.19 04:55	U	
Total BTEX		<0.0000953		0.0000953	mg/kg	06.25.19 04:55	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	100	74 - 126	%		
1,2-Dichloroethane-D4	102	80 - 120	%		
Toluene-D8	98	73 - 132	%		
4-Bromofluorobenzene	90	58 - 152	%		



# Certificate of Analytical Results

## 628481



### Ensolum, Dallas, TX

#### NMOCD Compliance

Sample Id: **7680640-1-BLK**  
 Lab Sample Id: 7680640-1-BLK  
 Analytical Method: BTEX by SW 8260C  
 Analyst: HOP  
 Seq Number: 3093378  
 Subcontractor: SUB: T104704215-19-29

Matrix: Solid  
 Date Collected:  
 % Moist:  
 Date Prep: 06.24.19 17.00  
 Prep seq: 7680640

Sample Depth:  
 Date Received:  
 Prep Method: 5030B  
 Tech: HOP

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000192	0.00100	0.000192	mg/kg	06.24.19 23:17	U	1
Toluene	108-88-3	<0.000129	0.00100	0.000129	mg/kg	06.24.19 23:17	U	1
Ethylbenzene	100-41-4	<0.0000955	0.00100	0.0000955	mg/kg	06.24.19 23:17	U	1
m,p-Xylenes	179601-23-1	<0.000362	0.00200	0.000362	mg/kg	06.24.19 23:17	U	1
o-Xylene	95-47-6	<0.000229	0.00100	0.000229	mg/kg	06.24.19 23:17	U	1
Total Xylenes	1330-20-7	<0.000229		0.000229	mg/kg	06.24.19 23:17	U	
Total BTEX		<0.0000955		0.0000955	mg/kg	06.24.19 23:17	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Dibromofluoromethane	96	74 - 126	%		
1,2-Dichloroethane-D4	108	80 - 120	%		
Toluene-D8	103	73 - 132	%		
4-Bromofluorobenzene	90	58 - 152	%		

Sample Id: **7680688-1-BLK**  
 Lab Sample Id: 7680688-1-BLK  
 Analytical Method: Chloride by EPA 300  
 Analyst: CHE  
 Seq Number: 3093520

Matrix: Solid  
 Date Collected:  
 % Moist:  
 Date Prep: 06.25.19 13.30  
 Prep seq: 7680688

Sample Depth:  
 Date Received:  
 Prep Method: E300P  
 Tech: CHE

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	06.25.19 18:43	U	1



**Certificate of Analytical Results**  
**628481**



**Ensolum, Dallas, TX**  
NMOCD Compliance

Sample Id: **7680769-1-BLK**

Matrix: Solid

Sample Depth:

Lab Sample Id: 7680769-1-BLK

Date Collected:

Date Received:

Analytical Method: TPH by SW8015 Mod

Prep Method: 1005

Analyst: ARM

% Moist:

Tech: ARM

Seq Number: 3093578

Date Prep: 06.25.19 12.00

Prep seq: 7680769

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<8.00	15.0	8.00	mg/kg	06.25.19 14:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<8.13	15.0	8.13	mg/kg	06.25.19 14:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.13	15.0	8.13	mg/kg	06.25.19 14:15	U	1
Total TPH	PHC635	<8.00		8.00	mg/kg	06.25.19 14:15	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	111	70 - 135	%		
o-Terphenyl	103	70 - 135	%		



# Form 2 - Surrogate Recoveries

**Project Name: NMOCD Compliance**

**Work Orders :** 628481,

**Project ID:** 01C1136021

**Lab Batch #:** 3093378

**Sample:** 7680640-1-BKS / BKS

**Batch:** 1 **Matrix:** Solid

	SURROGATE RECOVERY STUDY				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/24/19 21:18				
BTEX by SW 8260C  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0493	0.0500	99	74-126	
1,2-Dichloroethane-D4	0.0497	0.0500	99	80-120	
Toluene-D8	0.0489	0.0500	98	73-132	
4-Bromofluorobenzene	0.0506	0.0500	101	58-152	

**Lab Batch #:** 3093378

**Sample:** 7680640-1-BSD / BSD

**Batch:** 1 **Matrix:** Solid

	SURROGATE RECOVERY STUDY				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/24/19 21:39				
BTEX by SW 8260C  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0481	0.0500	96	74-126	
1,2-Dichloroethane-D4	0.0511	0.0500	102	80-120	
Toluene-D8	0.0495	0.0500	99	73-132	
4-Bromofluorobenzene	0.0508	0.0500	102	58-152	

**Lab Batch #:** 3093378

**Sample:** 628719-001 S / MS

**Batch:** 1 **Matrix:** Soil

	SURROGATE RECOVERY STUDY				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/24/19 21:59				
BTEX by SW 8260C  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0510	0.0500	102	74-126	
1,2-Dichloroethane-D4	0.0563	0.0500	113	80-120	
Toluene-D8	0.0477	0.0500	95	73-132	
4-Bromofluorobenzene	0.0501	0.0500	100	58-152	

**Lab Batch #:** 3093378

**Sample:** 628719-001 SD / MSD

**Batch:** 1 **Matrix:** Soil

	SURROGATE RECOVERY STUDY				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/24/19 22:19				
BTEX by SW 8260C  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0510	0.0500	102	74-126	
1,2-Dichloroethane-D4	0.0577	0.0500	115	80-120	
Toluene-D8	0.0491	0.0500	98	73-132	
4-Bromofluorobenzene	0.0511	0.0500	102	58-152	

\* Surrogate outside of Laboratory QC limits  
 \*\* Surrogates outside limits; data and surrogates confirmed by reanalysis  
 \*\*\* Poor recoveries due to dilution  
 Surrogate Recovery [D] = 100 \* A / B  
 All results are based on MDL and validated for QC purposes.

## Form 2 - Surrogate Recoveries

**Project Name: NMOCD Compliance**

**Work Orders :** 628481,

**Project ID:** 01C1136021

**Lab Batch #:** 3093378

**Sample:** 7680640-1-BLK / BLK

**Batch:** 1 **Matrix:** Solid

	<b>SURROGATE RECOVERY STUDY</b>				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/24/19 23:17				
<b>BTEX by SW 8260C</b>	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	0.0480	0.0500	96	74-126	
1,2-Dichloroethane-D4	0.0539	0.0500	108	80-120	
Toluene-D8	0.0514	0.0500	103	73-132	
4-Bromofluorobenzene	0.0448	0.0500	90	58-152	

**Lab Batch #:** 3093578

**Sample:** 7680769-1-BLK / BLK

**Batch:** 1 **Matrix:** Solid

	<b>SURROGATE RECOVERY STUDY</b>				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/25/19 14:15				
<b>TPH by SW8015 Mod</b>	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

**Lab Batch #:** 3093578

**Sample:** 7680769-1-BKS / BKS

**Batch:** 1 **Matrix:** Solid

	<b>SURROGATE RECOVERY STUDY</b>				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/25/19 14:40				
<b>TPH by SW8015 Mod</b>	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	93.4	100	93	70-135	
o-Terphenyl	46.3	50.0	93	70-135	

**Lab Batch #:** 3093578

**Sample:** 7680769-1-BSD / BSD

**Batch:** 1 **Matrix:** Solid

	<b>SURROGATE RECOVERY STUDY</b>				
<b>Units:</b> mg/kg	<b>Date Analyzed:</b> 06/25/19 15:06				
<b>TPH by SW8015 Mod</b>	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.3	100	94	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# Form 2 - Surrogate Recoveries

Project Name: NMOCD Compliance

Work Orders : 628481,

Project ID: 01C1136021

Lab Batch #: 3093578

Sample: 628413-001 S / MS

Batch: 1 Matrix: Soil

SURROGATE RECOVERY STUDY						
Units: mg/kg	Date Analyzed: 06/25/19 15:57	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
TPH by SW8015 Mod						
Analytes						
1-Chlorooctane		93.2	99.9	93	70-135	
o-Terphenyl		51.2	50.0	102	70-135	

Lab Batch #: 3093578

Sample: 628413-001 SD / MSD

Batch: 1 Matrix: Soil

SURROGATE RECOVERY STUDY						
Units: mg/kg	Date Analyzed: 06/25/19 16:22	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
TPH by SW8015 Mod						
Analytes						
1-Chlorooctane		89.6	99.6	90	70-135	
o-Terphenyl		46.7	49.8	94	70-135	

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries



**Project Name: NMOCD Compliance**

**Work Order #: 628481**

**Project ID: 01C1136021**

**Analyst: HOP**

**Date Prepared: 06/24/2019**

**Date Analyzed: 06/24/2019**

**Lab Batch ID: 3093378**

**Sample: 7680640-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

<b>BTEX by SW 8260C</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.000192	0.0500	0.0467	93	0.0500	0.0519	104	11	62-132	25	
Toluene	<0.000129	0.0500	0.0484	97	0.0500	0.0533	107	10	66-124	25	
Ethylbenzene	<0.0000955	0.0500	0.0506	101	0.0500	0.0554	111	9	71-134	25	
m,p-Xylenes	<0.000362	0.100	0.101	101	0.100	0.111	111	9	69-128	25	
o-Xylene	<0.000229	0.0500	0.0506	101	0.0500	0.0560	112	10	72-131	25	

**Analyst: CHE**

**Date Prepared: 06/25/2019**

**Date Analyzed: 06/25/2019**

**Lab Batch ID: 3093520**

**Sample: 7680688-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

<b>Chloride by EPA 300</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Chloride	<0.858	250	268	107	250	269	108	0	90-110	20	

Relative Percent Difference RPD = 200\*(C-F)/(C+F)

Blank Spike Recovery [D] = 100\*(C)/[B]

Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]

All results are based on MDL and Validated for QC Purposes



# BS / BSD Recoveries



**Project Name: NMOCD Compliance**

**Work Order #:** 628481

**Project ID:** 01C1136021

**Analyst:** ARM

**Date Prepared:** 06/25/2019

**Date Analyzed:** 06/25/2019

**Lab Batch ID:** 3093578

**Sample:** 7680769-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

<b>TPH by SW8015 Mod</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1090	109	1000	1060	106	3	70-135	20	
Diesel Range Organics (DRO)	<8.13	1000	1110	111	1000	1110	111	0	70-135	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries



**Project Name: NMOCD Compliance**

**Work Order # :** 628481

**Project ID:** 01C1136021

**Lab Batch ID:** 3093378

**QC- Sample ID:** 628719-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 06/24/2019

**Date Prepared:** 06/24/2019

**Analyst:** HOP

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

<b>BTEX by SW 8260C</b> <b>Analytes</b>	<b>Parent Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Spiked Sample Result [C]</b>	<b>Spiked Sample %R [D]</b>	<b>Spike Added [E]</b>	<b>Duplicate Spiked Sample Result [F]</b>	<b>Spiked Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
Benzene	<0.000238	0.0619	0.0461	74	0.0619	0.0466	75	1	62-132	25	
Toluene	<0.000160	0.0619	0.0465	75	0.0619	0.0497	80	7	66-124	25	
Ethylbenzene	<0.000118	0.0619	0.0495	80	0.0619	0.0512	83	3	71-134	25	
m,p-Xylenes	<0.000448	0.124	0.0977	79	0.124	0.101	81	3	69-128	25	
o-Xylene	<0.000284	0.0619	0.0452	73	0.0619	0.0459	74	2	72-131	25	

**Lab Batch ID:** 3093520

**QC- Sample ID:** 628481-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 06/25/2019

**Date Prepared:** 06/25/2019

**Analyst:** CHE

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

<b>Chloride by EPA 300</b> <b>Analytes</b>	<b>Parent Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Spiked Sample Result [C]</b>	<b>Spiked Sample %R [D]</b>	<b>Spike Added [E]</b>	<b>Duplicate Spiked Sample Result [F]</b>	<b>Spiked Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
Chloride	32.5	250	328	118	250	324	117	1	90-110	20	X

**Lab Batch ID:** 3093520

**QC- Sample ID:** 628483-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 06/25/2019

**Date Prepared:** 06/25/2019

**Analyst:** CHE

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

<b>Chloride by EPA 300</b> <b>Analytes</b>	<b>Parent Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Spiked Sample Result [C]</b>	<b>Spiked Sample %R [D]</b>	<b>Spike Added [E]</b>	<b>Duplicate Spiked Sample Result [F]</b>	<b>Spiked Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
Chloride	<0.858	250	278	111	250	274	110	1	90-110	20	X

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(C-F)/(C+F)

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



# Form 3 - MS / MSD Recoveries



**Project Name: NMOCD Compliance**

**Work Order # :** 628481

**Project ID:** 01C1136021

**Lab Batch ID:** 3093578

**QC- Sample ID:** 628413-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 06/25/2019

**Date Prepared:** 06/25/2019

**Analyst:** ARM

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

<b>TPH by SW8015 Mod</b>	<b>Parent Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Spiked Sample Result [C]</b>	<b>Spiked Sample %R [D]</b>	<b>Spike Added [E]</b>	<b>Duplicate Spiked Sample Result [F]</b>	<b>Spiked Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Gasoline Range Hydrocarbons (GRO)	<7.99	999	983	98	996	941	94	4	70-135	20	
Diesel Range Organics (DRO)	9.05	999	1060	105	996	1080	108	2	70-135	20	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
 Relative Percent Difference RPD = 200\*(C-F)/(C+F)

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Chain of Custody

Work Order No: 12291

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334  
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com

Page 1 of 1

Project Manager:	LT Svags	Bill to: (if different)	
Company Name:	ENSOLVM	Company Name:	
Address:	2351 W NW Hwy, Ste 1203	Address:	
City, State ZIP:	Dallas TX 75220	City, State ZIP:	
Phone:	972.467.0838	Email:	lsvags@ensolvm.com

Program:	<input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund
State of Project:	New Mexico
Reporting Level:	<input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV
Deliverables:	<input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	NMOC D Compliance	Turn Around	
Project Number:	011136021	Routine	<input checked="" type="checkbox"/>
Project Location:	IKP-817	Rush:	
Sampler's Name:	L3 Svags	Due Date:	
PO #:	011136001	Quote #:	

Temp Blank:	<input checked="" type="checkbox"/>	Wet Ice:	<input checked="" type="checkbox"/>	Thermometer:	<input checked="" type="checkbox"/>
Temperature (°C):	5.075	Correction Factor:	0.02	Total Containers:	
Received Intact:	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Cooler Custody Seals:	Yes	No	<input checked="" type="checkbox"/>		
Sample Custody Seals:	Yes	No	<input checked="" type="checkbox"/>		

Temp Blank:	<input checked="" type="checkbox"/>	Wet Ice:	<input checked="" type="checkbox"/>	Thermometer:	<input checked="" type="checkbox"/>
Temperature (°C):	5.075	Correction Factor:	0.02	Total Containers:	
Received Intact:	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Cooler Custody Seals:	Yes	No	<input checked="" type="checkbox"/>		
Sample Custody Seals:	Yes	No	<input checked="" type="checkbox"/>		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
IRP817CS-1		S	6.19.19	1135	2-3'	1	BTEX B260	MeOH: Me None: NO HNO3: HN H2SO4: H2	
IRP817CS-2		S	6.19.19	1146	14-15'	1	TPH 8015 (G, D, M) Chlorides 300	HCL: HL NaOH: Na Zn Acetate+ NaOH: Zn	
<del>ATG BY</del>									

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SIO2 Na Sr Ti Sn U V Zn  
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U 1631 / 245.1 / 7470 / 7471 .Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$8 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	6/19/19	<i>[Signature]</i>	<i>[Signature]</i>	

# Inter-Office Shipment

**IOS Number : 41894**

Date/Time: 06.20.2019 12:25      Created by: Brianna Teel  
Lab# From: **Midland**      Delivery Priority:  
Lab# To: **Houston**      Air Bill No.: 775529738140

Please send report to: Kalei Stout  
Address: 1211 W. Florida Ave  
E-Mail: kalei.stout@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
628481-001	S	1RP877CS-1	06.19.2019 11:35	SW8260CBTEX	BTEX by SW 8260C	06.26.2019	07.03.2019	KLS	BZ BZME EBZ XYLENE	
628481-002	S	1RP877CS-2	06.19.2019 11:46	SW8260CBTEX	BTEX by SW 8260C	06.26.2019	07.03.2019	KLS	BZ BZME EBZ XYLENE	

**Inter Office Shipment or Sample Comments:**

Relinquished By:   
Brianna Teel  
Date Relinquished: 06.20.2019

Received By:   
Ashly Kowalski  
Date Received: 06.21.2019 09:30  
Cooler Temperature: 3.0



# XENCO Laboratories



## Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 41894

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-068

Sent By: Brianna Teel

Date Sent: 06.20.2019 12.25 PM

Received By: Ashly Kowalski

Date Received: 06.21.2019 09.30 AM

### Sample Receipt Checklist

### Comments

- #1 \*Temperature of cooler(s)? 3
- #2 \*Shipping container in good condition? Yes
- #3 \*Samples received with appropriate temperature? Yes
- #4 \*Custody Seals intact on shipping container/ cooler? Yes
- #5 \*Custody Seals Signed and dated for Containers/coolers Yes
- #6 \*IOS present? Yes
- #7 Any missing/extra samples? No
- #8 IOS agrees with sample label(s)/matrix? Yes
- #9 Sample matrix/ properties agree with IOS? Yes
- #10 Samples in proper container/ bottle? Yes
- #11 Samples properly preserved? Yes
- #12 Sample container(s) intact? Yes
- #13 Sufficient sample amount for indicated test(s)? Yes
- #14 All samples received within hold time? Yes

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

### NonConformance:

### Corrective Action Taken:

### Nonconformance Documentation

Contact: \_\_\_\_\_ Contacted by : \_\_\_\_\_ Date: \_\_\_\_\_

Checklist reviewed by:

  
Ashly Kowalski

Date: 06.21.2019

**Client:** Ensolum

**Date/ Time Received:** 06/20/2019 11:53:00 AM

**Work Order #:** 628481

**Acceptable Temperature Range:** 0 - 6 degC  
**Air and Metal samples Acceptable Range:** Ambient  
**Temperature Measuring device used :** R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6*Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Xenco Stafford-BTEX
#18 Water VOC samples have zero headspace?	N/A

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

**Checklist completed by:** Brianna Teel Date: 06/20/2019  
 Brianna Teel

**Checklist reviewed by:** Kalei Stout Date: 06/23/2019  
 Kalei Stout