[Sheldon L. Hitchcock]
[HSE Coordinator]

May 29, 2018

Mike Bratcher
Oil Conservation Division, District 2
811 S First St.
Artesia, NM 88210

Ryan Mann
New Mexico State Land Office
1001 S. Atkinson
Roswell, NM 88230

Re: Work Plan
SRO SWD #103
API #: 30-015-24462
RP#: 2RP-4494
Unit Letter M Section 17, Township 26S, Range 28E
Eddy County, NM

Mr. Bratcher/Mr. Mann,

COG Operating, LLC (COG) is pleased to submit for your consideration the following remediation work plan for the SRO SWD #103. This plan is in response to an oil and produced water release that was discovered on November 13, 2017. Subsequent to the release a C-141 initial report was approved by the New Mexico Oil Conservation Division (NMOCD) on November 28, 2017.

BACKGROUND

The SRO SWD #103 release is located in Unit Letter M, Section 17, Township 26 South and Range 28 East in Eddy County, New Mexico. More specifically the latitude and longitude for this release are 32.0369301 North and -104.1160126 West.

On November 13, 2017, it was discovered that the main water line entering the facility had parted at a coupling just before the auto inlet valve. The release overfilled the lined containment and impacted the location and pasture, flowing down a pipeline right-of-way (ROW) for approximately two-tenths of a mile. Approximately ten (10) barrels (bbls) of oil and one-thousand three-hundred and ninety (1,390) bbls of produced water were released. A vacuum truck was able to recover approximately seven (7) bbls of oil and four-hundred and thirteen (413) bbls of produced water.

A site assessment and soil sampling utilizing an air-rotary drilling rig were conducted in order to define the impacted area. A site diagram is included in Appendix I. The analytical results from the soil sampling activities are summarized in the table below.

GROUNDWATER AND SITE RANKING

According to the New Mexico Office of the State Engineer (NMOSE) groundwater in the project vicinity is approximately one-hundred and twenty (120) feet below ground surface (BGS) (Appendix II). No water well or surface water was observed within one-thousand (1,000) feet of the release site. Therefore the site ranking for this release is zero (0) based on the following:

Depth to groundwater	>100-feet
Distance to surface water body	>1000-feet
Wellhead Protection Area	>1000-feet

Analytical Results

January 9, 2018

SRO SWD #103 November 13, 2017					
M-17-26S-28E					
Sample ID	Date	Chloride mg/Kg	Benzene mg/Kg	BTEX mg/Kg	TPH mg/Kg
BH-1 0-1’	1/9/2018	389	<0.00202	<0.00202	<15.0
BH-1 2-3’	1/9/2018	591	<0.00200	<0.00200	19.3
BH-1 4-5’	1/9/2018	871	-	-	-
BH-1 6-7’	1/9/2018	132	-	-	-
BH-1 9-10’	1/9/2018	95.8	-	-	-
BH-1 14-15	1/9/2018	184	-	-	-
BH-2 0-1’	1/9/2018	852	<0.00200	<0.00200	<15.0
BH-2 2-3’	1/9/2018	832	<0.00199	<0.00199	<15.0
BH-2 4-5’	1/9/2018	10.4	-	-	-
BH-2 6-7’	1/9/2018	139	-	-	-
BH-2 9-10’	1/9/2018	28.9	-	-	-
BH-2 14-15	1/9/2018	195	-	-	-
BH-3 0-1’	1/9/2018	1,240	<0.00200	<0.00200	<15.0
BH-3 2-3’	1/9/2018	2,290	<0.00199	<0.00199	<15.0
BH-3 4-5’	1/9/2018	139	-	-	-
BH-3 6-7’	1/9/2018	275	-	-	-
BH-3 9-10’	1/9/2018	148	-	-	-
BH-3 14-15	1/9/2018	474	-	-	-

January 10, 2018

SRO SWD #103 November 13, 2017					
M-17-26S-28E					
Sample ID	Date	Chloride mg/Kg	Benzene mg/Kg	BTEX mg/Kg	TPH mg/Kg
BH-4 0-1’	1/10/2018	4,920	<0.00198	<0.00198	<15.0
BH-4 2-3’	1/10/2018	3,600	<0.00198	<0.00198	<15.0
BH-4 4-5’	1/10/2018	1,310	-	-	-
BH-4 6-7’	1/10/2018	116	-	-	-
BH-4 9-10’	1/10/2018	268	-	-	-
BH-4 14-15	1/10/2018	413	-	-	-
BH-5 0-1'	1/10/2018	5,170	<0.00201	<0.00201	<15.0
BH-5 2-3’	1/10/2018	1,320	<0.00200	<0.00200	<15.0
BH-5 4-5’	1/10/2018	393	-	-	-
BH-5 6-7	1/10/2018	237	-	-	-
BH-6 0-1’	1/10/2018	27,400	<0.00202	<0.00202	<15.0
BH-6 2-3’	1/10/2018	5,020	<0.00200	<0.00200	<15.0
BH-6 4-5’	1/10/2018	194	-	-	-
BH-6 6-7’	1/10/2018	6.21	-	-	-
BH-6 9-10’	1/10/2018	6.59	-	-	-
BH-7 0-1’	1/10/2018	5,340	<0.00200	<0.00200	<15.0
BH-7 2-3’	1/10/2018	7,460	<0.00199	<0.00199	19.7
BH-7 4-5’	1/10/2018	310	-	-	-
BH-7 6-7’	1/10/2018	63.1	-	-	-
BH-8 0-1’	1/10/2018	3,160	<0.00201	<0.00201	<15.0
BH-8 2-3’	1/10/2018	10,300	<0.00200	<0.00200	<15.0
BH-8 4-5’	1/10/2018	180	-	-	-
BH-8 6-7’	1/10/2018	66.2	-	-	-
BH-9 0-1’	1/10/2018	12,700	<0.00199	<0.00199	<15.0
BH-9 2-3’	1/10/2018	11,100	<0.00202	<0.00202	<15.0
BH-9 4-5’	1/10/2018	66.6	-	-	-
BH-9 6-7’	1/10/2018	15.2	-	-	-

January 18, 2018

SRO SWD #103 November 13, 2017					
M-17-26S-28E					
Sample ID	**Date**	**Chloride mg/Kg**	**Benzene mg/Kg**	**BTEX mg/Kg**	**TPH mg/Kg**
BH-10 0-1’	1/18/2018	944	<0.00201	0.109	11,000
BH-10 2-3’	1/18/2018	652	0.00216	0.138	127
BH-10 4-5’	1/18/2018	70.3	<0.00198	<0.00198	<15.0
BH-10 6-7’	1/18/2018	32.4	<0.00199	<0.00199	<15.0
BH-10 9-10	1/18/2018	103	-	-	-
BH-11 0-1’	1/18/2018	2,760	<0.00199	<0.00199	<15.0
BH-11 2-3’	1/18/2018	1,710	<0.00200	<0.00200	<15.0
BH-11 4-5’	1/18/2018	1,670	-	-	-
BH-11 6-7’	1/18/2018	1,670	-	-	-
BH-11 9-10	1/18/2018	174	-	-	-

Background Analytical Results

SRO SWD #103 November 13, 2017					
M-17-26S-28E					
Sample ID	**Date**	**Chloride mg/Kg**	**Benzene mg/Kg**	**BTEX mg/Kg**	**TPH mg/Kg**
BG-1 0-1’	1/10/2018	12.6	-	-	-
BG-1 5’	1/10/2018	225	-	-	-
BG-1 10’	1/10/2018	<4.93	-	-	-
BG-2 0-1’	1/10/2018	11.5	-	-	-
BG-2 5’	1/10/2018	<4.93	-	-	-
BG-2 10’	1/10/2018	36.1	-	-	-
BG-2 15’	1/10/2018	274	-	-	-
BG-2 20’	1/10/2018	238	-	-	-
Average	0-1’	12.05			
Average	5’	112.5			
Average	10’	18.5			
Average	15’	274			
Average	20’	238			

PROPOSED REMEDIAL ACTIONS

- The tank battery and associated infrastructure will be removed.
- The impacted area in the vicinity of sample locations BH-1 through BH-9 will be excavated to a depth of four (4) feet BGS with care being taken not to threaten the underground infrastructure.
- The impacted area in the vicinity of BH-10 will be excavated to the depth of two (2) feet BGS.
- The impacted area in the vicinity of BH-11 will be excavated to the depth of four (4) feet BGS. Once the excavation is complete a 20-mil liner will be installed at the bottom of the excavation to encapsulate the remaining chloride impacts.
- All of the excavated material will be hauled to an NMOCD approved solid waste disposal facility.
- The excavation will be backfilled with clean "like" material and contoured to match the surrounding terrain.

REVEGETATION PLAN

Upon completion of the remediation the pasture portions of the work site will be backfilled with top soil and contoured to match the surrounding terrain. The surface will be left in a rough condition to approximate natural surface deviations. The site will be mechanically seeded with the New Mexico State Land Office (NMSLO) Loamy (L) seed mixture. The site will be periodically monitored for revegetation and the development of noxious weeds. Should the site fail to re-vegetate or noxious weeds develop COG will contact NMSLO for a mitigation strategy.

Should you have any questions or concerns please do not hesitate to contact me.

Sincerely,

Sheldon L. Hitchcock
HSE Coordinator
slhitchcock@concho.com

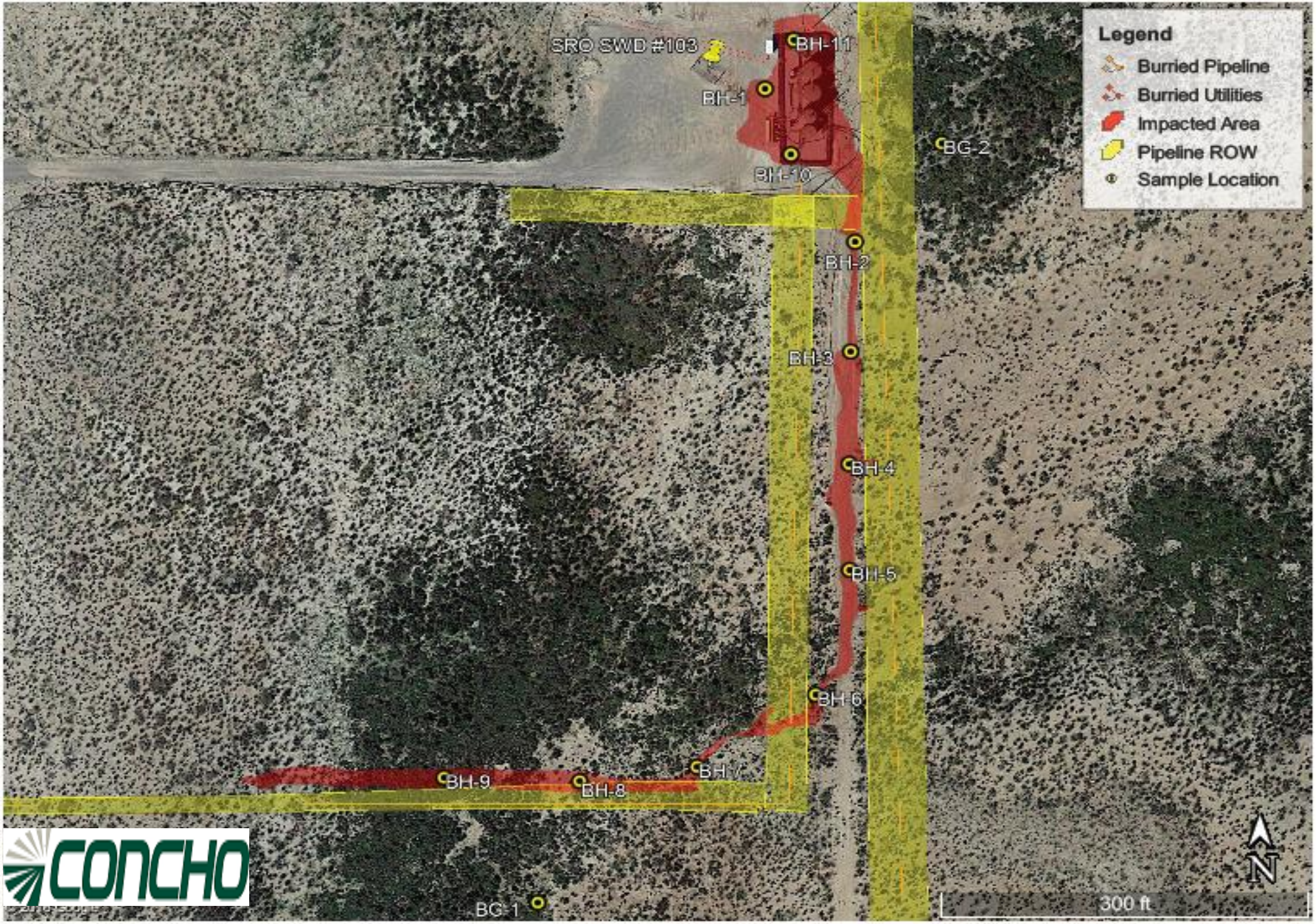
Enclosed:

Appendix I: Site Diagram
Appendix II: Groundwater Data
Appendix III: Initial C-141 (Copy)
Appendix IV: Analytical Reports and Chain-of-Custody Forms

APPENDIX I

November 11, 2013

SRO SWD #103



APPENDIX II

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02475	CUB	ED		2	4	13	26S	27E	581450	3545252*	2061	100		
C 02476	CUB	ED		4	1	24	26S	27E	580653	3544032*	2942	150		
C 02160 S7		ED	3	3	1	22	26S	28E	586638	3543998*	3280	300	120	180
C 02478	CUB	ED		2	1	05	26S	28E	583848	3549325*	4473	100		
C 04022 POD1	CUB	ED	4	4	2	15	26S	28E	588082	3545647	4672	220	175	45
C 02479	CUB	ED		4	4	10	26S	28E	587909	3546534*	4737	200		
C 02480	CUB	ED		4	4	10	26S	28E	587909	3546534*	4737	150		
C 02160 S6		ED	3	3	1	14	26S	28E	588232	3545635*	4818	300	120	180
C 02160 S5		ED	1	1	1	14	26S	28E	588225	3546237*	4943	300	120	180
C 04022 POD2	CUB	ED	2	2	2	27	26S	28E	588106	3543082	4963	250	145	105

Average Depth to Water: **136 feet**

Minimum Depth: **120 feet**

Maximum Depth: **175 feet**

Record Count: 10

Basin/County Search:

County: Eddy

UTMNAD83 Radius Search (in meters):

Easting (X): 583475 **Northing (Y):** 3544867 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

APPENDIX III

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

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

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 21 2017
RECEIVED

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

nAB1733 253521

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating, LLC OGRID #229137	Contact: Robert McNeil
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-683-7443
Facility Name: SRO SWD #103	Facility Type: SWD

Surface Owner: State	Mineral Owner: State	API No. 30-015-24462

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	17	26S	28E	660	South	660	West	Eddy

Latitude 32.0369301 Longitude -104.1160126 NAD83

NATURE OF RELEASE

Type of Release: Oil and Produced Water	Volume of Release: 10 bbl. Oil & 1,390 bbl. PW	Volume Recovered: 7 bbl. Oil & 413 bbl. PW
Source of Release: Line entering the facility	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: November 13, 2017 2:20 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom? Dakota Neel	Date and Hour: November 14, 2017 1:21 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The main line entering the facility broke at the connection to a coupling just before the auto inlet valve. The break caused the full flow of fluid into the SWD to release into the line facility. The line was repaired.

Describe Area Affected and Cleanup Action Taken.*

The release is within a lined facility and in the adjacent pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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: Rebecca Haskell	OIL CONSERVATION DIVISION
Printed Name: Rebecca Haskell	Signed By: Approved by Environmental Specialist:
Title: Senior HSE Coordinator	Approval Date: 11/28/17 Expiration Date: N/A
E-mail Address: rhaskell@concho.com	Conditions of Approval: See attached Attached ☐ 2RP-4494
Date: November 21, 2017 Phone: 432-683-7443	

* Attach Additional Sheets If Necessary

11/27/17 AB

APPENDIX IV

Analytical Report 573367

for

Tetra Tech- Midland

Project Manager: Ike Tavarez

SRO SWD #103

212C-MD-01056.200

18-JAN-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

18-JAN-18

Project Manager: **Ike Tavarez**
Tetra Tech- Midland
4000 N. Big Spring Suite 401
Midland, TX 79705

Reference: XENCO Report No(s): **573367**
SRO SWD #103
Project Address: Eddy County,NM

Ike Tavarez:

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) 573367. 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. 573367 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,

Kelsey Brooks
Project Manager

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 573367

Tetra Tech- Midland, Midland, TX

SRO SWD #103

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-1 0-1	S	01-09-18 00:00		573367-001
BH-1 2-3	S	01-09-18 00:00		573367-002
BH-1 4-5	S	01-09-18 00:00		573367-003
BH-1 6-7	S	01-09-18 00:00		573367-004
BH-1 9-10	S	01-09-18 00:00		573367-005
BH-1 14-15	S	01-09-18 00:00		573367-006
BH-2 0-1	S	01-09-18 00:00		573367-008
BH-2 2-3	S	01-09-18 00:00		573367-009
BH-2 4-5	S	01-09-18 00:00		573367-010
BH-2 6-7	S	01-09-18 00:00		573367-011
BH-2 9-10	S	01-09-18 00:00		573367-012
BH-2 14-15	S	01-09-18 00:00		573367-013
BH-3 0-1	S	01-09-18 00:00		573367-015
BH-3 2-3	S	01-09-18 00:00		573367-016
BH-3 4-5	S	01-09-18 00:00		573367-017
BH-3 6-7	S	01-09-18 00:00		573367-018
BH-3 9-10	S	01-09-18 00:00		573367-019
BH-3 14-15	S	01-09-18 00:00		573367-020
BH-4 0-1	S	01-10-18 00:00		573367-022
BH-4 2-3	S	01-10-18 00:00		573367-023
BH-4 4-5	S	01-10-18 00:00		573367-024
BH-4 6-7	S	01-10-18 00:00		573367-025
BH-4 9-10	S	01-10-18 00:00		573367-026
BH-4 14-15	S	01-10-18 00:00		573367-027
BH-5 0-1'	S	01-10-18 00:00		573367-028
BH-5 2-3	S	01-10-18 00:00		573367-029
BH-5 6-7	S	01-10-18 00:00		573367-030
BH-6 0-1	S	01-10-18 00:00		573367-033
BH-6 2-3	S	01-10-18 00:00		573367-034
BH-6 4-5	S	01-10-18 00:00		573367-035
BH-6 6-7	S	01-10-18 00:00		573367-036
BH-6 9-10	S	01-10-18 00:00		573367-037
BH-7 0-1	S	01-10-18 00:00		573367-039
BH-7 2-3	S	01-10-18 00:00		573367-040
BH-7 4-5	S	01-10-18 00:00		573367-041
BH-7 6-7	S	01-10-18 00:00		573367-042
BH-8 0-1	S	01-10-18 00:00		573367-044
BH-8 2-3	S	01-10-18 00:00		573367-045
BH-8 4-5	S	01-10-18 00:00		573367-046
BH-8 6-7	S	01-10-18 00:00		573367-047
BH-9 0-1	S	01-10-18 00:00		573367-049
BH-9 2-3	S	01-10-18 00:00		573367-050
BH-9 4-5	S	01-10-18 00:00		573367-051

BH-9 6-7	S	01-10-18 00:00	573367-052
BG-1 0-1	S	01-10-18 00:00	573367-054
BG-1 5	S	01-10-18 00:00	573367-055
BG-1 10	S	01-10-18 00:00	573367-056
BG-2 0-1	S	01-10-18 00:00	573367-057
BG-2 5	S	01-10-18 00:00	573367-058
BG-2 10	S	01-10-18 00:00	573367-059
BG-2 15	S	01-10-18 00:00	573367-060
BG-2 20	S	01-10-18 00:00	573367-061
BG-2 4-5	S	01-10-18 00:00	573367-062
BH-1 19-20	S	01-09-18 00:00	Not Analyzed
BH-2 19-20	S	01-09-18 00:00	Not Analyzed
BH-3 19-20	S	01-09-18 00:00	Not Analyzed
BH-5 9-10	S	01-10-18 00:00	Not Analyzed
BH-5 14-15	S	01-10-18 00:00	Not Analyzed
BH-6 14-15	S	01-10-18 00:00	Not Analyzed
BH-7 9-10	S	01-10-18 00:00	Not Analyzed
BH-8 9-10	S	01-10-18 00:00	Not Analyzed
BH-9 9-10	S	01-10-18 00:00	Not Analyzed

Sample receipt non conformances and comments:

Client added sample 062- BH-5 4-5
ss 01/12/18

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3038360 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3038373 BTEX by EPA 8021B
Lab Sample ID 573367-049 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Benzene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 573367-049.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3038388 Chloride by EPA 300
Lab Sample ID 573367-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 573367-001, -002, -003, -004, -005, -006, -008, -009, -010, -011, -012, -013, -015, -016.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Nitrate as N, Nitrite as N Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 573367-001, -002, -003, -004, -005, -006, -008, -009, -010, -011, -012, -013, -015, -016

Batch: LBA-3038412 BTEX by EPA 8021B
Lab Sample ID 573367-029 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 573367-001, -002, -008, -009, -015, -016, -022, -023, -028, -029, -050.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-001		573367-002		573367-003		573367-004		573367-005		573367-006	
	Field Id:	BH-1 0-1		BH-1 2-3		BH-1 4-5		BH-1 6-7		BH-1 9-10		BH-1 14-15	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 08:00		Jan-16-18 08:00									
	Analyzed:	Jan-16-18 17:02		Jan-16-18 17:22									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00202	0.00202	<0.00200	0.00200								
Toluene		<0.00202	0.00202	<0.00200	0.00200								
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200								
m,p-Xylenes		<0.00403	0.00403	<0.00401	0.00401								
o-Xylene		<0.00202	0.00202	<0.00200	0.00200								
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200								
Total BTEX		<0.00202	0.00202	<0.00200	0.00200								
Chloride by EPA 300	***Extracted:***	Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45	
	Analyzed:	Jan-16-18 14:14		Jan-16-18 14:21		Jan-16-18 14:28		Jan-16-18 14:56		Jan-16-18 15:17		Jan-16-18 15:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		389	25.0	591	25.0	871	24.9	132	24.8	95.8	49.2	184	49.2
TPH by SW8015 Mod	***Extracted:***	Jan-12-18 12:00		Jan-12-18 12:00									
	Analyzed:	Jan-13-18 17:35		Jan-13-18 17:58									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0								
Diesel Range Organics (DRO)		<15.0	15.0	19.3	15.0								
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0								
Total TPH		<15.0	15.0	19.3	15.0								

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-008		573367-009		573367-010		573367-011		573367-012		573367-013	
	Field Id:	BH-2 0-1		BH-2 2-3		BH-2 4-5		BH-2 6-7		BH-2 9-10		BH-2 14-15	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 08:00		Jan-16-18 08:00									
	Analyzed:	Jan-16-18 17:41		Jan-16-18 18:01									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00200	0.00200	<0.00199	0.00199								
Toluene		<0.00200	0.00200	<0.00199	0.00199								
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199								
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398								
o-Xylene		<0.00200	0.00200	<0.00199	0.00199								
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199								
Total BTEX		<0.00200	0.00200	<0.00199	0.00199								
Chloride by EPA 300	***Extracted:***	Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 11:45	
	Analyzed:	Jan-16-18 12:45		Jan-16-18 14:35		Jan-17-18 14:39		Jan-16-18 15:38		Jan-17-18 14:46		Jan-16-18 15:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		852	4.99	832	4.91	10.4	4.91	139	49.2	28.9	5.00	195	25.0
TPH by SW8015 Mod	***Extracted:***	Jan-12-18 12:00		Jan-12-18 12:00									
	Analyzed:	Jan-13-18 18:20		Jan-13-18 18:43									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0								
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0								
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0								
Total TPH		<15.0	15.0	<15.0	15.0								

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-015		573367-016		573367-017		573367-018		573367-019		573367-020	
	Field Id:	BH-3 0-1		BH-3 2-3		BH-3 4-5		BH-3 6-7		BH-3 9-10		BH-3 14-15	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00		Jan-09-18 00:00	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 08:00		Jan-16-18 08:00									
	Analyzed:	Jan-16-18 14:20		Jan-16-18 14:39									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00200	0.00200	<0.00199	0.00199								
Toluene		<0.00200	0.00200	<0.00199	0.00199								
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199								
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398								
o-Xylene		<0.00200	0.00200	<0.00199	0.00199								
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199								
Total BTEX		<0.00200	0.00200	<0.00199	0.00199								
Chloride by EPA 300	***Extracted:***	Jan-16-18 11:45		Jan-16-18 11:45		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00	
	Analyzed:	Jan-16-18 15:59		Jan-16-18 16:06		Jan-17-18 00:14		Jan-17-18 00:21		Jan-17-18 00:28		Jan-17-18 00:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1240	24.5	2290	25.0	139	25.0	275	49.3	148	24.9	474	24.9
TPH by SW8015 Mod	***Extracted:***	Jan-12-18 12:00		Jan-12-18 12:00									
	Analyzed:	Jan-13-18 19:06		Jan-13-18 19:28									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0								
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0								
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0								
Total TPH		<15.0	15.0	<15.0	15.0								

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-022		573367-023		573367-024		573367-025		573367-026		573367-027	
	Field Id:	BH-4 0-1		BH-4 2-3		BH-4 4-5		BH-4 6-7		BH-4 9-10		BH-4 14-15	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 08:00		Jan-16-18 08:00									
	Analyzed:	Jan-16-18 18:20		Jan-16-18 18:44									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00198	0.00198	<0.00198	0.00198								
Toluene		<0.00198	0.00198	<0.00198	0.00198								
Ethylbenzene		<0.00198	0.00198	<0.00198	0.00198								
m,p-Xylenes		<0.00397	0.00397	<0.00396	0.00396								
o-Xylene		<0.00198	0.00198	<0.00198	0.00198								
Total Xylenes		<0.00198	0.00198	<0.00198	0.00198								
Total BTEX		<0.00198	0.00198	<0.00198	0.00198								
Chloride by EPA 300	***Extracted:***	Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00	
	Analyzed:	Jan-17-18 00:56		Jan-17-18 01:03		Jan-17-18 01:10		Jan-17-18 01:17		Jan-16-18 23:53		Jan-17-18 01:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4920	49.5	3600	49.7	1310	24.8	116	24.7	268	5.00	413	24.7
TPH by SW8015 Mod	***Extracted:***	Jan-12-18 12:00		Jan-12-18 12:00									
	Analyzed:	Jan-13-18 19:51		Jan-13-18 20:56									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0								
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0								
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0								
Total TPH		<15.0	15.0	<15.0	15.0								

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested																			
	Lab Id:	573367-028		573367-029		573367-030		573367-033		573367-034		573367-035	
	Field Id:	BH-5 0-1'		BH-5 2-3		BH-5 6-7		BH-6 0-1		BH-6 2-3		BH-6 4-5	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 08:00		Jan-16-18 08:00				Jan-13-18 08:00		Jan-13-18 08:00			
	Analyzed:	Jan-16-18 19:03		Jan-16-18 12:44				Jan-13-18 15:36		Jan-13-18 15:55			
	Units/RL:	mg/kg	RL	mg/kg	RL			mg/kg	RL	mg/kg	RL		
Benzene		<0.00201	0.00201	<0.00200	0.00200			<0.00202	0.00202	<0.00200	0.00200		
Toluene		<0.00201	0.00201	<0.00200	0.00200			<0.00202	0.00202	<0.00200	0.00200		
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200			<0.00202	0.00202	<0.00200	0.00200		
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401			<0.00403	0.00403	<0.00401	0.00401		
o-Xylene		<0.00201	0.00201	<0.00200	0.00200			<0.00202	0.00202	<0.00200	0.00200		
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200			<0.00202	0.00202	<0.00200	0.00200		
Total BTEX		<0.00201	0.00201	<0.00200	0.00200			<0.00202	0.00202	<0.00200	0.00200		
Chloride by EPA 300	***Extracted:***	Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00	
	Analyzed:	Jan-17-18 01:52		Jan-17-18 01:59		Jan-17-18 02:20		Jan-17-18 02:27		Jan-17-18 02:34		Jan-17-18 01:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		5170	49.0	1320	24.9	237	4.97	27400	250	5020	99.2	194	4.99
TPH by SW8015 Mod	***Extracted:***	Jan-12-18 12:00		Jan-12-18 12:00				Jan-12-18 12:00		Jan-12-18 12:00			
	Analyzed:	Jan-13-18 21:18		Jan-13-18 21:40				Jan-14-18 01:54		Jan-14-18 02:15			
	Units/RL:	mg/kg	RL	mg/kg	RL			mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0			<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0			<15.0	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0			<15.0	15.0	<15.0	15.0		
Total TPH		<15.0	15.0	<15.0	15.0			<15.0	15.0	<15.0	15.0		

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-036		573367-037		573367-039		573367-040		573367-041		573367-042	
	Field Id:	BH-6 6-7		BH-6 9-10		BH-7 0-1		BH-7 2-3		BH-7 4-5		BH-7 6-7	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00	
BTEX by EPA 8021B	***Extracted:***					Jan-13-18 08:00		Jan-13-18 08:00					
	Analyzed:					Jan-13-18 16:14		Jan-13-18 16:34					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Benzene						<0.00200	0.00200	<0.00199	0.00199				
Toluene						<0.00200	0.00200	<0.00199	0.00199				
Ethylbenzene						<0.00200	0.00200	<0.00199	0.00199				
m,p-Xylenes						<0.00399	0.00399	<0.00398	0.00398				
o-Xylene						<0.00200	0.00200	<0.00199	0.00199				
Total Xylenes						<0.00200	0.00200	<0.00199	0.00199				
Total BTEX						<0.00200	0.00200	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 14:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-17-18 12:47		Jan-17-18 12:54		Jan-17-18 02:55		Jan-17-18 03:02		Jan-17-18 03:43		Jan-17-18 04:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6.21	4.99	6.59	4.97	5340	49.7	7460	99.6	310	4.90	63.1	5.00
TPH by SW8015 Mod	***Extracted:***					Jan-12-18 12:00		Jan-12-18 12:00					
	Analyzed:					Jan-14-18 02:36		Jan-14-18 02:57					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)						<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)						<15.0	15.0	19.7	15.0				
Oil Range Hydrocarbons (ORO)						<15.0	15.0	<15.0	15.0				
Total TPH						<15.0	15.0	19.7	15.0				

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-044		573367-045		573367-046		573367-047		573367-049		573367-050	
	Field Id:	BH-8 0-1		BH-8 2-3		BH-8 4-5		BH-8 6-7		BH-9 0-1		BH-9 2-3	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00	
BTEX by EPA 8021B	***Extracted:***	Jan-13-18 08:00		Jan-13-18 08:00						Jan-15-18 15:00		Jan-16-18 08:00	
	Analyzed:	Jan-13-18 16:51		Jan-13-18 17:10						Jan-16-18 01:47		Jan-16-18 15:43	
	Units/RL:	mg/kg	RL	mg/kg	RL					mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200					<0.00199	0.00199	<0.00202	0.00202
Toluene		<0.00201	0.00201	<0.00200	0.00200					<0.00199	0.00199	<0.00202	0.00202
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200					<0.00199	0.00199	<0.00202	0.00202
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401					<0.00398	0.00398	<0.00403	0.00403
o-Xylene		<0.00201	0.00201	<0.00200	0.00200					<0.00199	0.00199	<0.00202	0.00202
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200					<0.00199	0.00199	<0.00202	0.00202
Total BTEX		<0.00201	0.00201	<0.00200	0.00200					<0.00199	0.00199	<0.00202	0.00202
Chloride by EPA 300	***Extracted:***	Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-17-18 04:11		Jan-17-18 04:18		Jan-17-18 04:25		Jan-17-18 04:46		Jan-17-18 04:53		Jan-17-18 05:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3160	25.0	10300	98.2	180	4.96	66.2	4.99	12700	98.2	11100	99.8
TPH by SW8015 Mod	***Extracted:***	Jan-12-18 12:00		Jan-12-18 12:00						Jan-12-18 12:00		Jan-12-18 12:00	
	Analyzed:	Jan-14-18 03:18		Jan-14-18 03:39						Jan-14-18 04:00		Jan-14-18 05:02	
	Units/RL:	mg/kg	RL	mg/kg	RL					mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0					<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0					<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0					<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0					<15.0	15.0	<15.0	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573367-051		573367-052		573367-054		573367-055		573367-056		573367-057	
	Field Id:	BH-9 4-5		BH-9 6-7		BG-1 0-1		BG-1 5		BG-1 10		BG-2 0-1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00	
Chloride by EPA 300	***Extracted:***	Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-17-18 05:07		Jan-17-18 13:01		Jan-17-18 05:21		Jan-17-18 05:42		Jan-17-18 13:08		Jan-17-18 06:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		66.6	4.90	15.2	4.90	12.6	4.97	225	5.00	<4.93	4.93	11.5	5.00

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Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573367

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id: 212C-MD-01056.200
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Thu Jan-11-18 04:14 pm
Report Date: 18-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	573367-058		573367-059		573367-060		573367-061		573367-062	
	Field Id:	BG-2 5		BG-2 10		BG-2 15		BG-2 20		BG-2 4-5	
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00		Jan-10-18 00:00	
Chloride by EPA 300	***Extracted:***	Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-17-18 13:15		Jan-17-18 13:22		Jan-17-18 06:31		Jan-17-18 06:38		Jan-17-18 06:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.93	4.93	36.1	5.00	274	24.6	238	24.7	393	4.99

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Kelsey Brooks
Project Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

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

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038360 **Sample:** 573367-033 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 15:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 3038360 **Sample:** 573367-034 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 15:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	80-120	

Lab Batch #: 3038360 **Sample:** 573367-039 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 16:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 3038360 **Sample:** 573367-040 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 16:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

Lab Batch #: 3038360 **Sample:** 573367-044 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 16:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038360 **Sample:** 573367-045 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 17:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 3038399 **Sample:** 573367-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 17:35

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	100	89	70-135	
o-Terphenyl	45.5	50.0	91	70-135	

Lab Batch #: 3038399 **Sample:** 573367-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 17:58

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.6	100	84	70-135	
o-Terphenyl	43.2	50.0	86	70-135	

Lab Batch #: 3038399 **Sample:** 573367-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 18:20

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.1	100	89	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

Lab Batch #: 3038399 **Sample:** 573367-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 18:43

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	51.1	50.0	102	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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038399 **Sample:** 573367-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 19:06

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	100	91	70-135	
o-Terphenyl	46.9	50.0	94	70-135	

Lab Batch #: 3038399 **Sample:** 573367-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 19:28

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.1	100	91	70-135	
o-Terphenyl	47.4	50.0	95	70-135	

Lab Batch #: 3038399 **Sample:** 573367-022 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 19:51

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.6	100	85	70-135	
o-Terphenyl	44.3	50.0	89	70-135	

Lab Batch #: 3038399 **Sample:** 573367-023 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 20:56

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.1	100	86	70-135	
o-Terphenyl	45.5	50.0	91	70-135	

Lab Batch #: 3038399 **Sample:** 573367-028 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 21:18

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.2	100	90	70-135	
o-Terphenyl	47.4	50.0	95	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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038399 **Sample:** 573367-029 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 21:40

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.1	100	93	70-135	
o-Terphenyl	48.8	50.0	98	70-135	

Lab Batch #: 3038408 **Sample:** 573367-033 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 01:54

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.4	100	84	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

Lab Batch #: 3038408 **Sample:** 573367-034 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 02:15

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.9	100	85	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 3038408 **Sample:** 573367-039 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 02:36

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	100	88	70-135	
o-Terphenyl	44.9	50.0	90	70-135	

Lab Batch #: 3038408 **Sample:** 573367-040 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 02:57

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.2	100	80	70-135	
o-Terphenyl	43.0	50.0	86	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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038408 **Sample:** 573367-044 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 03:18

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.3	100	88	70-135	
o-Terphenyl	44.3	50.0	89	70-135	

Lab Batch #: 3038408 **Sample:** 573367-045 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 03:39

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.8	100	88	70-135	
o-Terphenyl	45.6	50.0	91	70-135	

Lab Batch #: 3038408 **Sample:** 573367-049 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 04:00

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.0	100	86	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 3038408 **Sample:** 573367-050 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 05:02

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.9	100	92	70-135	
o-Terphenyl	47.8	50.0	96	70-135	

Lab Batch #: 3038373 **Sample:** 573367-049 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 01:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 573367-029 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 12:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 3038412 **Sample:** 573367-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 14:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 3038412 **Sample:** 573367-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 14:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 3038412 **Sample:** 573367-050 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 15:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 3038412 **Sample:** 573367-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 17:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 573367-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 17:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 3038412 **Sample:** 573367-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 17:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 3038412 **Sample:** 573367-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 18:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 3038412 **Sample:** 573367-022 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 18:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 3038412 **Sample:** 573367-023 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 18:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 573367-028 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 19:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 3038360 **Sample:** 7637495-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/13/18 10:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 3038399 **Sample:** 7637445-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/13/18 14:32

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71.2	100	71	70-135	
o-Terphenyl	35.1	50.0	70	70-135	

Lab Batch #: 3038408 **Sample:** 7637446-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/14/18 00:51

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.3	100	72	70-135	
o-Terphenyl	36.2	50.0	72	70-135	

Lab Batch #: 3038373 **Sample:** 7637512-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/16/18 01:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 7637559-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/16/18 12:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 3038360 **Sample:** 7637495-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/13/18 08:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 3038399 **Sample:** 7637445-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/13/18 14:54

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.6	100	71	70-135	
o-Terphenyl	42.2	50.0	84	70-135	

Lab Batch #: 3038408 **Sample:** 7637446-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/14/18 01:12

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71.6	100	72	70-135	
o-Terphenyl	36.2	50.0	72	70-135	

Lab Batch #: 3038373 **Sample:** 7637512-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/15/18 23:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 7637559-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/16/18 10:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 3038360 **Sample:** 7637495-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/13/18 09:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 3038399 **Sample:** 7637445-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/13/18 15:17

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.4	100	73	70-135	
o-Terphenyl	38.8	50.0	78	70-135	

Lab Batch #: 3038408 **Sample:** 7637446-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/14/18 01:33

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.6	100	74	70-135	
o-Terphenyl	37.3	50.0	75	70-135	

Lab Batch #: 3038373 **Sample:** 7637512-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/15/18 23:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 7637559-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/16/18 10:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 3038399 **Sample:** 573366-055 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 16:02

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.1	100	82	70-135	
o-Terphenyl	41.2	50.0	82	70-135	

Lab Batch #: 3038360 **Sample:** 573366-047 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 18:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 3038408 **Sample:** 573367-049 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 04:21

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.2	100	86	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 3038373 **Sample:** 573367-049 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 00:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

* 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: SRO SWD #103

Work Orders : 573367,

Project ID: 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 573367-029 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 11:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 3038360 **Sample:** 573366-047 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 09:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 3038399 **Sample:** 573366-055 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/13/18 16:25

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.6	100	71	70-135	
o-Terphenyl	36.2	50.0	72	70-135	

Lab Batch #: 3038408 **Sample:** 573367-049 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/14/18 04:41

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.0	100	86	70-135	
o-Terphenyl	45.7	50.0	91	70-135	

Lab Batch #: 3038373 **Sample:** 573367-049 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 00:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

* 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: SRO SWD #103

Work Orders : 573367, **Project ID:** 212C-MD-01056.200

Lab Batch #: 3038412 **Sample:** 573367-029 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/16/18 11:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

* 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: SRO SWD #103

Work Order #: 573367 **Project ID:** 212C-MD-01056.200

Analyst: ALJ **Date Prepared:** 01/13/2018 **Date Analyzed:** 01/13/2018

Lab Batch ID: 3038360 **Sample:** 7637495-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.0998	0.104	104	0.100	0.104	104	0	70-130	35	
Toluene	<0.00200	0.0998	0.103	103	0.100	0.103	103	0	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.101	101	0.100	0.101	101	0	71-129	35	
m,p-Xylenes	<0.00399	0.200	0.203	102	0.200	0.203	102	0	70-135	35	
o-Xylene	<0.00200	0.0998	0.100	100	0.100	0.101	101	1	71-133	35	

Analyst: ALJ **Date Prepared:** 01/15/2018 **Date Analyzed:** 01/15/2018

Lab Batch ID: 3038373 **Sample:** 7637512-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00201	0.100	0.0906	91	0.101	0.0933	92	3	70-130	35	
Toluene	<0.00201	0.100	0.0869	87	0.101	0.0896	89	3	70-130	35	
Ethylbenzene	<0.00201	0.100	0.0832	83	0.101	0.0857	85	3	71-129	35	
m,p-Xylenes	<0.00402	0.201	0.166	83	0.202	0.171	85	3	70-135	35	
o-Xylene	<0.00201	0.100	0.0845	85	0.101	0.0869	86	3	71-133	35	

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: SRO SWD #103

Work Order #: 573367 **Project ID:** 212C-MD-01056.200

Analyst: ALJ **Date Prepared:** 01/16/2018 **Date Analyzed:** 01/16/2018

Lab Batch ID: 3038412 **Sample:** 7637559-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.100	0.0943	94	0.100	0.0924	92	2	70-130	35	
Toluene	<0.00200	0.100	0.0915	92	0.100	0.0898	90	2	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0872	87	0.100	0.0874	87	0	71-129	35	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.201	0.176	88	1	70-135	35	
o-Xylene	<0.00200	0.100	0.0864	86	0.100	0.0878	88	2	71-133	35	

Analyst: OJS **Date Prepared:** 01/16/2018 **Date Analyzed:** 01/16/2018

Lab Batch ID: 3038388 **Sample:** 7637550-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	273	109	250	275	110	1	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: SRO SWD #103

Work Order #: 573367 **Project ID:** 212C-MD-01056.200

Analyst: OJS **Date Prepared:** 01/16/2018 **Date Analyzed:** 01/16/2018

Lab Batch ID: 3038483 **Sample:** 7637553-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	256	102	250	257	103	0	90-110	20	

Analyst: OJS **Date Prepared:** 01/16/2018 **Date Analyzed:** 01/17/2018

Lab Batch ID: 3038486 **Sample:** 7637554-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	264	106	250	261	104	1	90-110	20	

Analyst: ALJ **Date Prepared:** 01/12/2018 **Date Analyzed:** 01/13/2018

Lab Batch ID: 3038399 **Sample:** 7637445-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	860	86	1000	918	92	7	70-135	35	
Diesel Range Organics (DRO)	<15.0	1000	819	82	1000	860	86	5	70-135	35	

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: SRO SWD #103

Work Order #: 573367 **Project ID:** 212C-MD-01056.200

Analyst: ALJ **Date Prepared:** 01/12/2018 **Date Analyzed:** 01/14/2018

Lab Batch ID: 3038408 **Sample:** 7637446-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	747	75	1000	781	78	4	70-135	35	
Diesel Range Organics (DRO)	<15.0	1000	904	90	1000	939	94	4	70-135	35	

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: SRO SWD #103

Work Order # : 573367 **Project ID:** 212C-MD-01056.200

Lab Batch ID: 3038360 **QC- Sample ID:** 573366-047 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/13/2018 **Date Prepared:** 01/13/2018 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00202	0.101	0.0970	96	0.100	0.0819	82	17	70-130	35	
Toluene	<0.00202	0.101	0.0883	87	0.100	0.0736	74	18	70-130	35	
Ethylbenzene	<0.00202	0.101	0.0742	73	0.100	0.0662	66	11	71-129	35	X
m,p-Xylenes	<0.00403	0.202	0.145	72	0.201	0.132	66	9	70-135	35	X
o-Xylene	<0.00202	0.101	0.0742	73	0.100	0.0661	66	12	71-133	35	X

Lab Batch ID: 3038373 **QC- Sample ID:** 573367-049 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/16/2018 **Date Prepared:** 01/15/2018 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00199	0.0996	0.0748	75	0.100	0.0662	66	12	70-130	35	X
Toluene	<0.00199	0.0996	0.0683	69	0.100	0.0594	59	14	70-130	35	X
Ethylbenzene	<0.00199	0.0996	0.0583	59	0.100	0.0514	51	13	71-129	35	X
m,p-Xylenes	<0.00398	0.199	0.110	55	0.200	0.0985	49	11	70-135	35	X
o-Xylene	<0.00199	0.0996	0.0590	59	0.100	0.0520	52	13	71-133	35	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: SRO SWD #103

Work Order # : 573367 **Project ID:** 212C-MD-01056.200

Lab Batch ID: 3038412 **QC- Sample ID:** 573367-029 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/16/2018 **Date Prepared:** 01/16/2018 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.100	0.0657	66	0.0998	0.0612	61	7	70-130	35	X
Toluene	<0.00200	0.100	0.0617	62	0.0998	0.0570	57	8	70-130	35	X
Ethylbenzene	<0.00200	0.100	0.0566	57	0.0998	0.0516	52	9	71-129	35	X
m,p-Xylenes	<0.00401	0.200	0.112	56	0.200	0.102	51	9	70-135	35	X
o-Xylene	<0.00200	0.100	0.0581	58	0.0998	0.0529	53	9	71-133	35	X

Lab Batch ID: 3038388 **QC- Sample ID:** 573367-008 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/16/2018 **Date Prepared:** 01/16/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	852	250	1040	75	250	1050	79	1	90-110	20	X

Lab Batch ID: 3038388 **QC- Sample ID:** 573367-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/16/2018 **Date Prepared:** 01/16/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	832	246	1010	72	246	1070	97	6	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: SRO SWD #103

Work Order # : 573367 **Project ID:** 212C-MD-01056.200

Lab Batch ID: 3038483 **QC- Sample ID:** 573367-026 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/17/2018 **Date Prepared:** 01/16/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	268	250	510	97	250	506	95	1	90-110	20	

Lab Batch ID: 3038483 **QC- Sample ID:** 573367-035 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/17/2018 **Date Prepared:** 01/16/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	194	250	451	103	250	446	101	1	90-110	20	

Lab Batch ID: 3038486 **QC- Sample ID:** 573367-041 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/17/2018 **Date Prepared:** 01/16/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	310	245	548	97	245	546	96	0	90-110	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.

Form 3 - MS / MSD Recoveries

Project Name: SRO SWD #103

Work Order # : 573367 **Project ID:** 212C-MD-01056.200

Lab Batch ID: 3038486 **QC- Sample ID:** 573367-054 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/17/2018 **Date Prepared:** 01/16/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	12.6	249	274	105	249	276	106	1	90-110	20	

Lab Batch ID: 3038399 **QC- Sample ID:** 573366-055 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/13/2018 **Date Prepared:** 01/12/2018 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	500	476	95	500	525	105	10	70-135	35	
Diesel Range Organics (DRO)	<15.0	500	499	100	500	557	111	11	70-135	35	

Lab Batch ID: 3038408 **QC- Sample ID:** 573367-049 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/14/2018 **Date Prepared:** 01/12/2018 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	805	81	1000	773	77	4	70-135	35	
Diesel Range Organics (DRO)	<15.0	1000	804	80	1000	772	77	4	70-135	35	

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

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.

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance					Hold
	BH-1 0-1	01/09/18			X			X	1		X		X												X							
	BH-1 2-3	01/09/18			X			X	1		X		X												X							
	BH-1 4-5	01/09/18			X			X	1																X							
	BH-1 6-7	01/09/18			X			X	1																X							
	BH-1 9-10	01/09/18			X			X	1																X							
	BH-1 14-15	01/09/18			X			X	1																X							
	BH-1 19-20	01/09/18			X			X	1																							X
	BH-2 0-1	01/09/18			X			X	1		X		X												X							
	BH-2 2-3	01/09/18			X			X	1		X		X												X							
	BH-2 4-5	01/09/18			X			X	1																X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: Maurie Smith
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: Maurie Smith Date: 1-11-18 Time: 16:14

LAB USE ONLY
Sample Temperature

REMARKS: Standard

- ☐ **RUSH:** Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

ND DELIVERED FEDEX UPS Tracking #: _____

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Temp: 0.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 0.2

Final 1.000

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO -)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BTEX 8260B																																		
	BH-2 6-7	01/09/18			X				X			1																X							
	BH-2 9-10	01/09/18			X				X			1																X							
	BH-2 14-15	01/09/18			X				X			1																X							
	BH-2 19-20	01/09/18			X				X			1																								X
	BH-3 0-1	01/09/18			X				X			1		X		X												X							
	BH-3 2-3	01/09/18			X				X			1		X		X												X							
	BH-3 4-5	01/09/18			X				X			1																X							
	BH-3 6-7	01/09/18			X				X			1																X							
	BH-3 9-10	01/09/18			X				X			1																X							
	BH-3 14-15	01/09/18			X				X			1																X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 4pm	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: Date: 1-11-18 Time: 16:14

LAB USE ONLY

Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	Site Manager: Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	Project #: 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	Sampler Signature: Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	TIME	MATRIX WATER	SOIL		PRESERVATIVE METHOD HCL	HNO_3	ICE			# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-3 19-20	01/09/18			X				X			1																								X
	BH-4 0-1	01/10/18			X				X			1		X		X														X						
	BH-4 2-3	01/10/18			X				X			1		X		X														X						
	BH-4 4-5	01/10/18			X				X			1																		X						
	BH-4 6-7	01/10/18			X				X			1																		X						
	BH-4 9-10	01/10/18			X				X			1																		X						
	BH-4 14-15	01/10/18			X				X			1																								X
	BH-5 0-1	01/10/18			X				X			1		X		X														X						
	BH-5 2-3	01/10/18			X				X			1		X		X														X						
	BH-5 6-7	01/10/18			X				X			1																		X						

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: [signature] Date: 1.11.18 Time: 16:14

LAB USE ONLY
Sample Temperature

REMARKS:
- RUSH: Same Day 24 hr 48 hr 72 hr
- Rush Charges Authorized
- Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	Site Manager: Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	Project #: 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	Sampler Signature: Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-5 9-10	01/10/18			X				X			1																							X
	BH-5 14-15	01/10/18			X				X			1																							X
	BH-6 0-1	01/10/18			X				X			1		X		X													X						
	BH-6 2-3	01/10/18			X				X			1		X		X													X						
	BH-6 4-5	01/10/18			X				X			1																	X						
	BH-6 6-7	01/10/18			X				X			1																	X						
	BH-6 9-10	01/10/18			X				X			1																	X						
	BH-6 14-15	01/10/18			X				X			1																							X
	BH-7 0-1	01/10/18			X				X			1		X		X													X						
	BH-7 2-3	01/10/18			X				X			1		X		X													X						

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: [signature] Date: 1.11.18 Time: 16:14

LAB USE ONLY

Sample Temperature

REMARKS:

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste 401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG
Site Manager: Ike Tavarez
Project Name: SRO SWD #103
Project Location: (county, state) Eddy County, NM
Project #: 212C-MD-01056.200
Invoice to: COG
Receiving Laboratory: Xenco
Sampler Signature: Clair Gonzales
Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	TIME	MATRIX: WATER	SOIL	PRESERVATIVE METHOD: HCL	HNO_3	ICE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	Hold
	BH-7 4-5	01/10/18			X			X	1																X				
	BH-7 6-7	01/10/18			X			X	1																X				
	BH-7 9-10	01/10/18			X			X	1																				X
	BH-8 0-1	01/10/18			X			X	1		X		X												X				
	BH-8 2-3	01/10/18			X			X	1		X		X												X				
	BH-8 4-5	01/10/18			X			X	1																X				
	BH-8 6-7	01/10/18			X			X	1																X				
	BH-8 9-10	01/10/18			X			X	1																				X
	BH-9 0-1	01/10/18			X			X	1		X		X												X				
	BH-9 2-3	01/10/18			X			X	1		X		X												X				

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Clair Gonzales	1/11/18	4:14	[signature]	1.11.18	16:14
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY
Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ____________

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-9 4-5	01/10/18			X				X			1																	X							
	BH-9 6-7	01/10/18			X				X			1																	X							
	BH-9 9-10	01/10/18			X				X			1																								X
	BG-1 0-1	01/10/18			X				X			1																	X							
	BG-1 5	01/10/18			X				X			1																	X							
	BG-1 10	01/10/18			X				X			1																	X							
	BG-2 0-1	01/10/18			X				X			1																	X							
	BG-2 5	01/10/18			X				X			1																	X							
	BG-2 10	01/10/18			X				X			1																	X							
	BG-2 15	01/10/18			X				X			1																	X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: Brianne Smith
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Date: 1.11.18 Time: 16:14

LAB USE ONLY

Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)
	BG-2 20	01/10/18			X				X		1	

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
														X							

Relinquished by: Clair Gonzales Date: 1/11/18 Time: 414
Received by: [signature] Date: 1-11-18 Time: 16:14

Relinquished by: Date: Time:
Received by: Date: Time:

Relinquished by: Date: Time:
Received by: Date: Time:

LAB USE ONLY
Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-1 0-1	01/09/18			X				X			1		X		X												X							
	BH-1 2-3	01/09/18			X				X			1		X		X												X							
	BH-1 4-5	01/09/18			X				X			1																X							
	BH-1 6-7	01/09/18			X				X			1																X							
	BH-1 9-10	01/09/18			X				X			1																X							
	BH-1 14-15	01/09/18			X				X			1																X							
	BH-1 19-20	01/09/18			X				X			1																							X
	BH-2 0-1	01/09/18			X				X			1		X		X												X							
	BH-2 2-3	01/09/18			X				X			1		X		X												X							
	BH-2 4-5	01/09/18			X				X			1																X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: Maurie Smith Date: 1-11-18 Time: 16:14
Relinquished by:	Date:	Time:	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received by: Date: Time:

LAB USE ONLY
Sample Temperature

REMARKS: Standard

- ☐ **RUSH:** Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

ND DELIVERED FEDEX UPS Tracking #: _____

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Temp: 0.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 0.2

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO -)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-2 6-7	01/09/18			X				X			1																	X							
	BH-2 9-10	01/09/18			X				X			1																	X							
	BH-2 14-15	01/09/18			X				X			1																	X							
	BH-2 19-20	01/09/18			X				X			1																	X							X
	BH-3 0-1	01/09/18			X				X			1		X		X													X							
	BH-3 2-3	01/09/18			X				X			1		X		X													X							
	BH-3 4-5	01/09/18			X				X			1																	X							
	BH-3 6-7	01/09/18			X				X			1																	X							
	BH-3 9-10	01/09/18			X				X			1																	X							
	BH-3 14-15	01/09/18			X				X			1																	X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 4pm	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: [signature] Date: 1.11.18 Time: 16:14

LAB USE ONLY
Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-3 19-20	01/09/18			X			X	1																							X
	BH-4 0-1	01/10/18			X			X	1		X		X												X							
	BH-4 2-3	01/10/18			X			X	1		X		X												X							
	BH-4 4-5	01/10/18			X			X	1																X							
	BH-4 6-7	01/10/18			X			X	1																X							
	BH-4 9-10	01/10/18			X			X	1																X							
	BH-4 14-15	01/10/18			X			X	1																							X
	BH-5 0-1	01/10/18			X			X	1		X		X												X							
	BH-5 2-3 ~~BH-5 4-5 BB~~	01/10/18			X			X	1		X		X												X							
	BH-5 6-7	01/10/18			X			X	1																X							

Relinquished by: Clair Gonzals	Date: 1/11/18	Time: 414	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: [signature] Date: 1.11.18 Time: 16:14

LAB USE ONLY

Sample Temperature

REMARKS: BH-5 4-5 Run CL Hold BTEX + TPH

- ☐ **RUSH:** Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

S733367

Client Name: COG	Site Manager: Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	Project #: 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	Sampler Signature: Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-5 9-10	01/10/18			X				X			1																							
	BH-5 14-15	01/10/18			X				X			1																							X
	BH-6 0-1	01/10/18			X				X			1																							X
	BH-6 2-3	01/10/18			X				X			1		X		X													X						
	BH-6 4-5	01/10/18			X				X			1		X		X													X						
	BH-6 6-7	01/10/18			X				X			1																	X						
	BH-6 9-10	01/10/18			X				X			1																	X						
	BH-6 14-15	01/10/18			X				X			1																	X						
	BH-7 0-1	01/10/18			X				X			1																							X
	BH-7 2-3	01/10/18			X				X			1		X		X													X						
		01/10/18			X				X			1		X		X													X						

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: [signature] Date: 1.11.18 Time: 16:14
Relinquished by:	Date:	Time:	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received by: Date: Time:

LAB USE ONLY
Sample Temperature

REMARKS:
☐ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

S73367

Client Name: COG	Site Manager: Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	Project #: 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	Sampler Signature: Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	TIME	MATRIX WATER	SOIL		PRESERVATIVE METHOD HCL	HNO_3	ICE			# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-7 4-5	01/10/18			X				X			1																	X							
	BH-7 6-7	01/10/18			X				X			1																	X							
	BH-7 9-10	01/10/18			X				X			1																	X							X
	BH-8 0-1	01/10/18			X				X			1		X		X													X							
	BH-8 2-3	01/10/18			X				X			1		X		X													X							
	BH-8 4-5	01/10/18			X				X			1																	X							
	BH-8 6-7	01/10/18			X				X			1																	X							
	BH-8 9-10	01/10/18			X				X			1																								X
	BH-9 0-1	01/10/18			X				X			1		X		X													X							
	BH-9 2-3	01/10/18			X				X			1		X		X													X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: Brianne Rush
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: Brianne Rush Date: 1.11.18 Time: 16:14

LAB USE ONLY

Sample Temperature

REMARKS:

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

573367

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-9 4-5	01/10/18			X				X			1																X							
	BH-9 6-7	01/10/18			X				X			1																X							
	BH-9 9-10	01/10/18			X				X			1																							X
	BG-1 0-1	01/10/18			X				X			1																X							
	BG-1 5	01/10/18			X				X			1																X							
	BG-1 10	01/10/18			X				X			1																X							
	BG-2 0-1	01/10/18			X				X			1																X							
	BG-2 5	01/10/18			X				X			1																X							
	BG-2 10	01/10/18			X				X			1																X							
	BG-2 15	01/10/18			X				X			1																X							

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: Brianne Smith
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Date: 1.11.18 Time: 16:14

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB USE ONLY
Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	Hold
	BG-2 20	01/10/18			X			X	1																	X					
	BH-5 4-5	01/10/18			X			X	1																	X					

Relinquished by: Clair Gonzales	Date: 1/11/18	Time: 414	Received by: [signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: [signature] Date: 1-11-18 Time: 16:14

LAB USE ONLY

Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Final 1.000

Page 51 of 52

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01/11/2018 04:14:00 PM

Work Order #: 573367

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)?	.2
#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)?	**No**
#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: Shawnee Smith Date: 01/12/2018

Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 01/12/2018

Kelsey Brooks

Analytical Report 574085

for

Tetra Tech- Midland

Project Manager: Ike Tavarez

SRO SWD #103

29-JAN-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

29-JAN-18

Project Manager: **Ike Tavarez**
Tetra Tech- Midland
4000 N. Big Spring Suite 401
Midland, TX 79705

Reference: XENCO Report No(s): **574085**
SRO SWD #103
Project Address: Eddy County,NM

Ike Tavarez:

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) 574085. 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. 574085 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,

Kelsey Brooks
Project Manager

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 574085

Tetra Tech- Midland, Midland, TX

SRO SWD #103

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-10 0-1	S	01-18-18 00:00		574085-001
BH-10 2-3	S	01-18-18 00:00		574085-002
BH-10 4-5	S	01-18-18 00:00		574085-003
BH-10 6-7	S	01-18-18 00:00		574085-004
BH-10 9-10	S	01-18-18 00:00		574085-005
BH-11 0-1	S	01-18-18 00:00		574085-008
BH-11 2-3	S	01-18-18 00:00		574085-009
BH-11 4-5	S	01-18-18 00:00		574085-010
BH-11 6-7	S	01-18-18 00:00		574085-011
BH-11 9-10	S	01-18-18 00:00		574085-012
BH-10 14-15	S	01-18-18 00:00		Not Analyzed
BH-10 19-20	S	01-18-18 00:00		Not Analyzed
BH-11 14-15	S	01-18-18 00:00		Not Analyzed

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3038956 BTEX by EPA 8021B

Lab Sample ID 574085-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Ethylbenzene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 574085-001, -002, -003, -004, -008, -009.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 574085

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id:

Contact: Ike Tavarez

Project Location: Eddy County,NM

Date Received in Lab: Fri Jan-19-18 03:00 pm

Report Date: 29-JAN-18

Project Manager: Kelsey Brooks

Analysis Requested																			
	Lab Id:	574085-001		574085-002		574085-003		574085-004		574085-005		574085-008							
	Field Id:	BH-10 0-1		BH-10 2-3		BH-10 4-5		BH-10 6-7		BH-10 9-10		BH-11 0-1							
	Depth:																		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL							
	Sampled:	Jan-18-18 00:00		Jan-18-18 00:00		Jan-18-18 00:00		Jan-18-18 00:00		Jan-18-18 00:00		Jan-18-18 00:00							
BTEX by EPA 8021B	***Extracted:***	Jan-22-18 09:00		Jan-22-18 09:00		Jan-22-18 09:00		Jan-22-18 09:00				Jan-22-18 09:00							
	Analyzed:	Jan-22-18 12:21		Jan-22-18 12:41		Jan-22-18 13:00		Jan-22-18 13:19				Jan-22-18 16:09							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL						
Benzene		<0.00201	0.00201	0.00216	0.00200	<0.00198	0.00198	<0.00199	0.00199			<0.00199	0.00199						
Toluene		0.0123	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199			<0.00199	0.00199						
Ethylbenzene		<0.00201	0.00201	0.0220	0.00200	<0.00198	0.00198	<0.00199	0.00199			<0.00199	0.00199						
m,p-Xylenes		0.0970	0.00402	0.0907	0.00399	<0.00397	0.00397	<0.00398	0.00398			<0.00398	0.00398						
o-Xylene		<0.00201	0.00201	0.0234	0.00200	<0.00198	0.00198	<0.00199	0.00199			<0.00199	0.00199						
Total Xylenes		0.0970	0.00201	0.114	0.00200	<0.00198	0.00198	<0.00199	0.00199			<0.00199	0.00199						
Total BTEX		0.109	0.00201	0.138	0.00200	<0.00198	0.00198	<0.00199	0.00199			<0.00199	0.00199						
Chloride by EPA 300	***Extracted:***	Jan-23-18 16:45		Jan-24-18 13:00		Jan-24-18 13:00		Jan-25-18 09:00		Jan-25-18 09:00		Jan-25-18 09:00							
	Analyzed:	Jan-23-18 23:20		Jan-25-18 11:47		Jan-25-18 11:54		Jan-26-18 11:31		Jan-25-18 21:14		Jan-25-18 21:21							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		944	4.94	652	5.00	70.3	5.00	32.4	4.97	103	24.9	2760	24.9						
TPH By SW8015 Mod	***Extracted:***	Jan-23-18 14:00		Jan-23-18 14:00		Jan-23-18 14:00		Jan-23-18 14:00				Jan-23-18 14:00							
	Analyzed:	Jan-24-18 08:57		Jan-24-18 07:17		Jan-24-18 07:38		Jan-24-18 07:58				Jan-24-18 08:18							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		655	74.8	20.2	15.0	<15.0	15.0	<15.0	15.0			<15.0	15.0						
Diesel Range Organics (DRO)		7080	74.8	86.7	15.0	<15.0	15.0	<15.0	15.0			<15.0	15.0						
Oil Range Hydrocarbons (ORO)		3300	74.8	19.7	15.0	<15.0	15.0	<15.0	15.0			<15.0	15.0						
Total TPH		11000	74.8	127	15.0	<15.0	15.0	<15.0	15.0			<15.0	15.0						

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 574085

Tetra Tech- Midland, Midland, TX

Project Name: SRO SWD #103

Project Id:
Contact: Ike Tavarez
Project Location: Eddy County,NM

Date Received in Lab: Fri Jan-19-18 03:00 pm
Report Date: 29-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	574085-009		574085-010		574085-011		574085-012					
	Field Id:	BH-11 2-3		BH-11 4-5		BH-11 6-7		BH-11 9-10					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jan-18-18 00:00		Jan-18-18 00:00		Jan-18-18 00:00		Jan-18-18 00:00					
BTEX by EPA 8021B	***Extracted:***	Jan-22-18 09:00											
	Analyzed:	Jan-22-18 16:28											
	Units/RL:	mg/kg	RL										
Benzene		<0.00200	0.00200										
Toluene		<0.00200	0.00200										
Ethylbenzene		<0.00200	0.00200										
m,p-Xylenes		<0.00401	0.00401										
o-Xylene		<0.00200	0.00200										
Total Xylenes		<0.00200	0.00200										
Total BTEX		<0.00200	0.00200										
Chloride by EPA 300	***Extracted:***	Jan-25-18 09:00		Jan-25-18 09:00		Jan-25-18 09:00		Jan-25-18 09:00					
	Analyzed:	Jan-25-18 21:28		Jan-25-18 21:35		Jan-25-18 21:42		Jan-25-18 21:49					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		1710	25.0	1670	50.0	1670	25.0	174	49.0				
TPH By SW8015 Mod	***Extracted:***	Jan-23-18 14:00											
	Analyzed:	Jan-24-18 08:37											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0										
Diesel Range Organics (DRO)		<15.0	15.0										
Oil Range Hydrocarbons (ORO)		<15.0	15.0										
Total TPH		<15.0	15.0										

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The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Kelsey Brooks
Project Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

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

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: SRO SWD #103

Work Orders : 574085,

Project ID:

Lab Batch #: 3038956 **Sample:** 574085-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 12:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 3038956 **Sample:** 574085-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 12:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 3038956 **Sample:** 574085-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 13:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0249	0.0300	83	80-120	

Lab Batch #: 3038956 **Sample:** 574085-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 13:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 3038956 **Sample:** 574085-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 16:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

* 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: SRO SWD #103

Work Orders : 574085,

Project ID:

Lab Batch #: 3038956 **Sample:** 574085-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 16:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

Lab Batch #: 3039135 **Sample:** 574085-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 07:17

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.9	100	90	70-135	
o-Terphenyl	45.9	50.0	92	70-135	

Lab Batch #: 3039135 **Sample:** 574085-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 07:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-135	
o-Terphenyl	51.9	50.0	104	70-135	

Lab Batch #: 3039135 **Sample:** 574085-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 07:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	99.7	94	70-135	
o-Terphenyl	47.7	49.9	96	70-135	

Lab Batch #: 3039135 **Sample:** 574085-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 08:18

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.9	102	70-135	
o-Terphenyl	51.3	50.0	103	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: SRO SWD #103

Work Orders : 574085,

Project ID:

Lab Batch #: 3039135 **Sample:** 574085-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 08:37

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.8	100	70-135	
o-Terphenyl	50.6	49.9	101	70-135	

Lab Batch #: 3039135 **Sample:** 574085-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 08:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.0	99.7	98	70-135	
o-Terphenyl	52.3	49.9	105	70-135	

Lab Batch #: 3038956 **Sample:** 7637845-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/22/18 11:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0242	0.0300	81	80-120	

Lab Batch #: 3039135 **Sample:** 7637989-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/24/18 01:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 3038956 **Sample:** 7637845-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/22/18 09:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

* 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: SRO SWD #103

Work Orders : 574085,

Project ID:

Lab Batch #: 3039135 **Sample:** 7637989-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/24/18 01:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	51.7	50.0	103	70-135	

Lab Batch #: 3038956 **Sample:** 7637845-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/22/18 10:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0358	0.0300	119	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 3039135 **Sample:** 7637989-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/24/18 02:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	57.7	50.0	115	70-135	

Lab Batch #: 3038956 **Sample:** 574085-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 10:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 3039135 **Sample:** 573941-046 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 02:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.9	111	70-135	
o-Terphenyl	64.1	50.0	128	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: SRO SWD #103

Work Orders : 574085,

Project ID:

Lab Batch #: 3038956 **Sample:** 574085-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/18 11:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 3039135 **Sample:** 573941-046 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/24/18 03:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	99.8	119	70-135	
o-Terphenyl	62.0	49.9	124	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: SRO SWD #103

Work Order #: 574085 **Project ID:**

Analyst: ALJ **Date Prepared:** 01/22/2018 **Date Analyzed:** 01/22/2018

Lab Batch ID: 3038956 **Sample:** 7637845-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00199	0.0996	0.0737	74	0.100	0.0722	72	2	70-130	35	
Toluene	<0.00199	0.0996	0.0765	77	0.100	0.0739	74	3	70-130	35	
Ethylbenzene	<0.00199	0.0996	0.0793	80	0.100	0.0791	79	0	71-129	35	
m,p-Xylenes	<0.00398	0.199	0.156	78	0.200	0.156	78	0	70-135	35	
o-Xylene	<0.00199	0.0996	0.0800	80	0.100	0.0807	81	1	71-133	35	

Analyst: OJS **Date Prepared:** 01/23/2018 **Date Analyzed:** 01/23/2018

Lab Batch ID: 3039235 **Sample:** 7637929-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	261	104	250	252	101	4	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: SRO SWD #103

Work Order #: 574085 **Project ID:**

Analyst: OJS **Date Prepared:** 01/24/2018 **Date Analyzed:** 01/24/2018

Lab Batch ID: 3039225 **Sample:** 7637985-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	274	110	250	274	110	0	90-110	20	

Analyst: OJS **Date Prepared:** 01/25/2018 **Date Analyzed:** 01/25/2018

Lab Batch ID: 3039275 **Sample:** 7638064-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	271	108	250	271	108	0	90-110	20	

Analyst: ARM **Date Prepared:** 01/23/2018 **Date Analyzed:** 01/24/2018

Lab Batch ID: 3039135 **Sample:** 7637989-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	842	84	1000	828	83	2	70-135	35	
Diesel Range Organics (DRO)	<15.0	1000	971	97	1000	931	93	4	70-135	35	

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: SRO SWD #103

Work Order # : 574085 **Project ID:**

Lab Batch ID: 3038956 **QC- Sample ID:** 574085-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/22/2018 **Date Prepared:** 01/22/2018 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00202	0.101	0.0464	46	0.100	0.0414	41	11	70-130	35	X
Toluene	0.0123	0.101	0.0537	41	0.100	0.0453	33	17	70-130	35	X
Ethylbenzene	<0.00202	0.101	0.0772	76	0.100	0.0627	63	21	71-129	35	X
m,p-Xylenes	0.0970	0.202	0.142	22	0.200	0.116	10	20	70-135	35	X
o-Xylene	<0.00202	0.101	0.0522	52	0.100	0.0432	43	19	71-133	35	X

Lab Batch ID: 3039225 **QC- Sample ID:** 574308-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/24/2018 **Date Prepared:** 01/24/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	5.65	250	285	112	250	289	113	1	90-110	20	X

Lab Batch ID: 3039225 **QC- Sample ID:** 574309-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/24/2018 **Date Prepared:** 01/24/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	12.7	250	274	105	250	277	106	1	90-110	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.

Form 3 - MS / MSD Recoveries

Project Name: SRO SWD #103

Work Order # : 574085 **Project ID:**

Lab Batch ID: 3039235 **QC- Sample ID:** 573941-046 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/23/2018 **Date Prepared:** 01/23/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.02	251	262	104	251	271	108	3	90-110	20	

Lab Batch ID: 3039235 **QC- Sample ID:** 573970-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/23/2018 **Date Prepared:** 01/23/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	910	249	1180	108	249	1140	92	3	90-110	20	

Lab Batch ID: 3039275 **QC- Sample ID:** 574401-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/25/2018 **Date Prepared:** 01/25/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<4.94	247	260	105	247	249	101	4	90-110	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.

Form 3 - MS / MSD Recoveries

Project Name: SRO SWD #103

Work Order # : 574085 **Project ID:**

Lab Batch ID: 3039275 **QC- Sample ID:** 574401-010 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/25/2018 **Date Prepared:** 01/25/2018 **Analyst:** OJS

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<4.95	248	251	101	248	250	101	0	90-110	20	

Lab Batch ID: 3039135 **QC- Sample ID:** 573941-046 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/24/2018 **Date Prepared:** 01/23/2018 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	925	93	998	981	98	6	70-135	35	
Diesel Range Organics (DRO)	<15.0	999	1040	104	998	1080	108	4	70-135	35	

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.

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

574085

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE			# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-10 0-1	01/18/18			X				X			1		X		X												X							
	BH-10 2-3	01/18/18			X				X			1		X		X												X							
	BH-10 4-5	01/18/18			X				X			1		X		X												X							
	BH-10 6-7	01/18/18			X				X			1		X		X												X							
	BH-10 9-10	01/18/18			X				X			1																X							
	BH-10 14-15	01/18/18			X				X			1																							X
	BH-10 19-20	01/18/18			X				X			1																							X
	BH-11 0-1	01/18/18			X				X			1		X		X												X							
	BH-11 2-3	01/18/18			X				X			1		X		X												X							
	BH-11 4-5	01/18/18			X				X			1																X							

Relinquished by:	Date: 12-19-18	Time: 3:00	Received by:
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: Date: 1-19-18 Time: 3:00

LAB USE ONLY

Sample Temperature

(Circle) HAND DE

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Temp: 2.7°c IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.5°c

ORIGINAL COPY

Final 1.000

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

574085

Client Name: COG	**Site Manager:** Ike Tavarez
Project Name: SRO SWD #103	
Project Location: (county, state) Eddy County, NM	**Project #:** 212C-MD-01056.200
Invoice to: COG	
Receiving Laboratory: Xenco	**Sampler Signature:** Clair Gonzales

Comments: Run deeper samples if TPH exceeds 100 mg/Kg.
Run deeper samples if benzene exceeds 10 mg/kg, or total BTEX exceeds 50 mg/kg.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE			# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO -)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	BH-11 6-7	01/18/18			X				X			1																X							
	BH-11 9-10	01/18/18			X				X			1																X							
	BH-11 14-15	01/18/18			X				X			1																							X

Relinquished by:	Date: 1-19-18	Time: 3:00	Received by: Bill Rick
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Date: 1-19-18 Time: 3:00

LAB USE ONLY

Sample Temperature

REMARKS:

☐ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAN

Temp: 2.7°C IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.5°C

ORIGINAL COPY

Final 1.000

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01/19/2018 03:00:00 PM

Work Order #: 574085

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)?	2.5
#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)?	**No**
#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: Shawnee Smith Date: 01/19/2018

Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 01/19/2018

Kelsey Brooks