Armando Martinez
Operations Lead, Portfolio Operations Central

INFORMATION ONLY

March 9, 2021

New Mexico Oil Conservation Division – District I
1625 N. French Drive
Hobbs, New Mexico 88240

Re: 2020 Soil Assessment Report – N Vacuum ABO West 23
Case No. 1RP-2424
Lea County, New Mexico

Dear Bradford Billings:

Chevron Environmental Management Company (CEMC) submits herein the *2020 Soil Assessment Report* for 1RP-2424, N Vacuum ABO West 23. The Site is located approximately 2.88 miles southwest of Buckeye, in Unit D, Section 34, Township 17 South, Range 34 East, Lea County, New Mexico. The Report was prepared by Arcadis U.S., Inc. (Arcadis), on behalf of CEMC. Based on the 2020 soil investigation data, additional assessment activities will be evaluated, and a proposed scope will be included in a Work Plan for review and approval to further delineate chloride impact in soil.

If you have any questions regarding this submittal, please contact Scott Foord of Arcadis at (713) 953-4853 or me at (505) 690 5408.

Respectfully,

Armando Martinez

Encl. 2020 Soil Assessment Report – N Vacuum ABO West 23

Armando Martinez
Operations Lead Central
Portfolio Operations - Central
354 State Highway 38, Questa, NM 87556-0469
Tel 575 586 7639 Mobile 505 690 5408 Fax 575 586 0811
amarti@chevron.com

ARCADIS

Chevron Environmental Management Company

2020 Soil Assessment Report

N Vacuum ABO West 23
Case No. 1RP-2424

March 2021

2020 Soil Assessment Report

N Vacuum ABO West 23
Case No. 1RP-2424

March 2021

Prepared By:
Arcadis U.S., Inc.
10205 Westheimer Road, Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620

Prepared For:
Armando Martinez
Operations Lead Central
Chevron Environmental Management Company
P.O. Box 469
Questa, New Mexico 87556

Our Ref:
30064855

Morgan Jordan
Task Manager I

Scott Foord, PG
Certified Project Manager

Contents

Tables

Figures

Appendices

1 Introduction

Arcadis U.S., Inc. (Arcadis) prepared this Site Assessment Report (Report), on behalf of Chevron Environmental Management Company (CEMC), summarizing the soil assessment activities conducted for the N Vacuum ABO West 23 (Site).

2 Project Summary

The Site is located approximately 2.88 miles southwest of Buckeye, in Unit D, Section 34, Township 17 South, Range 34 East, Lea County, New Mexico. A site location map is included as **Figure 1**.

On January 28, 2009, a frozen plug formed in the flow line causing the line to burst releasing 3.03 barrels (bbls) of oil and 7.43 bbls of produced water. The Initial C-141 Form stated a vacuum truck removed the pooled liquid, recovering approximately 9 bbls of oil and produced water. According to the New Mexico Office of the State Engineers (NMOSE) database, there is a water well approximately 0.82 miles east of the Site with a depth to groundwater of 108 feet below ground surface (bgs). The Initial C-141 Form for this release was approved by the New Mexico Oil Conservation Division (NMOCD) on February 15, 2010. The release was assigned remediation permit number 1RP-2424. The Initial C-141 Form for this release is included in **Appendix A**.

3 2020 Soil Assessment

On December 17, 2020, Arcadis personnel collected soil samples from eight locations (SB-1 through SB-8) within the release area. The sample locations were determined based on information obtained by Arcadis from the Initial C-141 Forms and from Chevron personnel familiar with the release location associated with remediation permit number 1RP-2424. The soil samples were collected with a hand auger at depths ranging from ground surface to approximately 4 feet (ft) below ground surface (bgs). Hand auger refusal was encountered within all boring locations. Each boring location was backfilled with the remaining excavated soil. Soils were characterized and logged by a field geologist based on the Unified Soil Classification System (USCS), including texture, structure, and consistence at each sample location from surface to refusal depths encountered within each boring. Boring logs for borings installed deeper than 2 ft bgs are included in **Appendix B**. Soil sample locations are presented on **Figure 2**. Sample containers (4 oz. soil jars) were supplied by Eurofins Xenco Laboratories, and samples were collected and placed on ice for delivery to Eurofins Xenco Laboratories in Midland, Texas for analysis.

The soil samples were analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Protection Agency (USEPA) Method 8021B;
- Total Petroleum Hydrocarbons (TPH) as gasoline range organic (TPH-GRO) by USEPA Method 8015;
- TPH as diesel range organic (TPH-DRO) by USEPA Method 8015;
- TPH as motor oil range organic (TPH-MRO) by USEPA Method 8015; and
- Chloride by USEPA Method 300.

4 Soil Analytical Results

The soil analytical results were compared to the revised New Mexico Administration Code (NMAC) screening levels for BTEX, TPH, and chloride for depth to groundwater greater than 100 ft bgs (revised Rule 19.15.29). A

summary of the soil sample analytical results is presented in **Table 1**. Copies of the certified analytical reports and chain-of-custody documentation from Eurofins Xenco Laboratories are presented in **Appendix C**. The soil analytical map is presented in **Figure 3**.

4.1 BTEX

- Benzene concentrations were reported below the NMAC standard of 10 milligrams per kilogram (mg/kg) at all sample locations.
- Total BTEX concentrations were reported below the NMAC standard of 50 mg/kg at all sample locations.

4.2 TPH

- TPH (GRO + DRO) concentrations were reported below the NMAC standard of 1,000 mg/kg at all sample locations.
- Total TPH (GRO + DRO + MRO) concentrations were reported below the NMAC standard of 2,500 mg/kg at all sample locations.

4.3 Chloride

- Chloride concentrations were reported below the revised Rule 19.15.29 screening limit of 20,000 mg/kg at all sample locations. However, concentrations did exceed the revised Rule (19.15.29.13) restoration screening criteria of 600 mg/kg at two sample location (SB-3 and SB-6).
    - SB-3 (1 – 1.5 ft) at 857 mg/kg
    - SB-5 (0 – 0.5 ft) at 4,910 mg/kg

5 Conclusion

Analytical results associated with the recent assessment activities indicate that concentrations of chloride above the restoration screening criteria of 600 mg/kg within the top 4 feet bgs of the soil column are present in surface and shallow soil in the vicinity of SB-3 and SB-5. Based upon the findings presented in this report, additional soil assessment activities are recommended to further delineate the chloride impact in soil at the Site. The revised C-141 Form is presented in **Appendix E**.

Tables

Table 1
2020 Soil Analytical Results
Chevron Environmental Management Company
N Vacuum Abo West 23
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

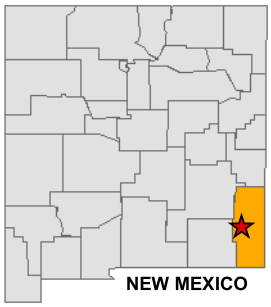
Sample I.D. No.	Sample Depth (feet bgs)	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Gasoline Range Organics	Diesel Range Organics	Total GRO + DRO	Motor Oil Range Organics	Total TPH	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMAC Standards			**10**	**--**	**--**	**--**	**50**	**--**	**--**	**1,000**	**--**	**2,500**	**20,000**
Restoration Requirements													**600***
SB-1	0-0.5	12/17/2020	<0.000208	<0.00101	<0.000338	<0.000805	<0.000208	19.2 J	<15.0	19.2 J	<15.0	19.2 J	97.1
	1-2	12/17/2020	<0.000208	<0.00100	<0.000337	<0.000803	<0.000208	<15.0	<15.0	<15.0	<15.0	<15.0	23.0
	3-4	12/17/2020	<0.000205	<0.000990	<0.000332	<0.000792	<0.000205	<15.0	<15.0	<15.0	<15.0	<15.0	245
DUP-1 (SB-1)	3-4	12/17/2020	<0.000205	<0.000990	<0.000332	<0.000792	<0.000205	<15.0	<15.0	<15.0	<15.0	<15.0	237
SB-2	0-0.5	12/17/2020	<0.000209	<0.00101	<0.000338	<0.000806	<0.000209	19.7 J	<15.0	19.7 J	<15.0	19.7 J	18.2
	1-2	12/17/2020	<0.000207	<0.000998	<0.000335	<0.000798	<0.000207	16.1 J	<15.0	16.1 J	<15.0	16.1 J	291
SB-3	0-0.5	12/17/2020	<0.000206	<0.000994	<0.000334	<0.000795	<0.000206	16.3 J	25.8 J	42.1 J	<14.9	42.1	241
	1-1.5	12/17/2020	<0.000209	<0.00101	<0.000338	<0.000806	<0.000209	15.4 J	<15.0	15.4 J	<15.0	15.4 J	***857***
SB-4	0-0.5	12/17/2020	<0.000209	<0.00101	0.00107	0.00594	0.00701	17.1 J	28.2 J	45.3 J	19.8 J	65.1	16.4
SB-5	0-0.5	12/17/2020	<0.000208	<0.00100	0.00136	0.00742	0.00878	18.3 J	80.1	98.4 J	64.7	163	***4,910***
SB-6	0-0.5	12/17/2020	<0.000205	<0.000990	<0.000332	<0.000792	<0.000205	15.2 J	16.0 J	31.2 J	<14.9	31.2 J	396
SB-7	0-0.5	12/17/2020	<0.000207	<0.00100	0.00178	0.00395	0.00573	16.3 J	18.6 J	34.9 J	<15.0	34.9 J	39.1
SB-8	0-0.5	12/17/2020	<0.000205	<0.000990	<0.000332	<0.000792	<0.000205	16.8 J	<15.0	16.8 J	<15.0	16.8 J	146

Legend:
BOLD = Analytes exceeding NMAC standards
J: Result is less than the Reporting Limit but greater than or equal to the MDL and the concentration is an approximate value
'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)
mg/kg: Milligram per Kilogram
BTEX : Benzene, Toluene, Ethylbenzene, and Total Xylenes
NMAC : New Mexico Administration Code
TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics
TPH MRO: Total Petroluem Hydrocarbons Motor Oil Range Organics
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics
" ' " : Indicates one foot
*Revised screening limit and restoration criteria within the first 4 feet below ground surface per Rule 19.15.29 effective August 14, 2018
DUP : Duplicate sample

Notes:
1. Chloride analyzed by United States Environmental Protection Agency Method 300
2. TPH analyzed by TPH by SW8015 Mod DRO/ MRO Method
3. BTEX analyzed by USEPA Method 8260C
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)

Figures

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



N

NOTES:
1. Datum: D_WGS_1984
2. Site Location: 32.538277, -103.698055

Chevron Environmental Management Company
N Vacuum Abo West 23
Lea County, New Mexico

SITE LOCATION MAP

ARCADIS

FIGURE
1

P:\: T:_ENV\Chevron\Chevron_NVacuumAboWest23\MXD\Figure 1_Site Location Map.mxd: 2/10/2021: 11:47:24 AM

LEGEND:

- Soil Sample Locations

NOTES:
1. Datum: GCS_WGS_1984
2. Site Location: 32.797328, -103.554933

N

0 25 50 100 Feet

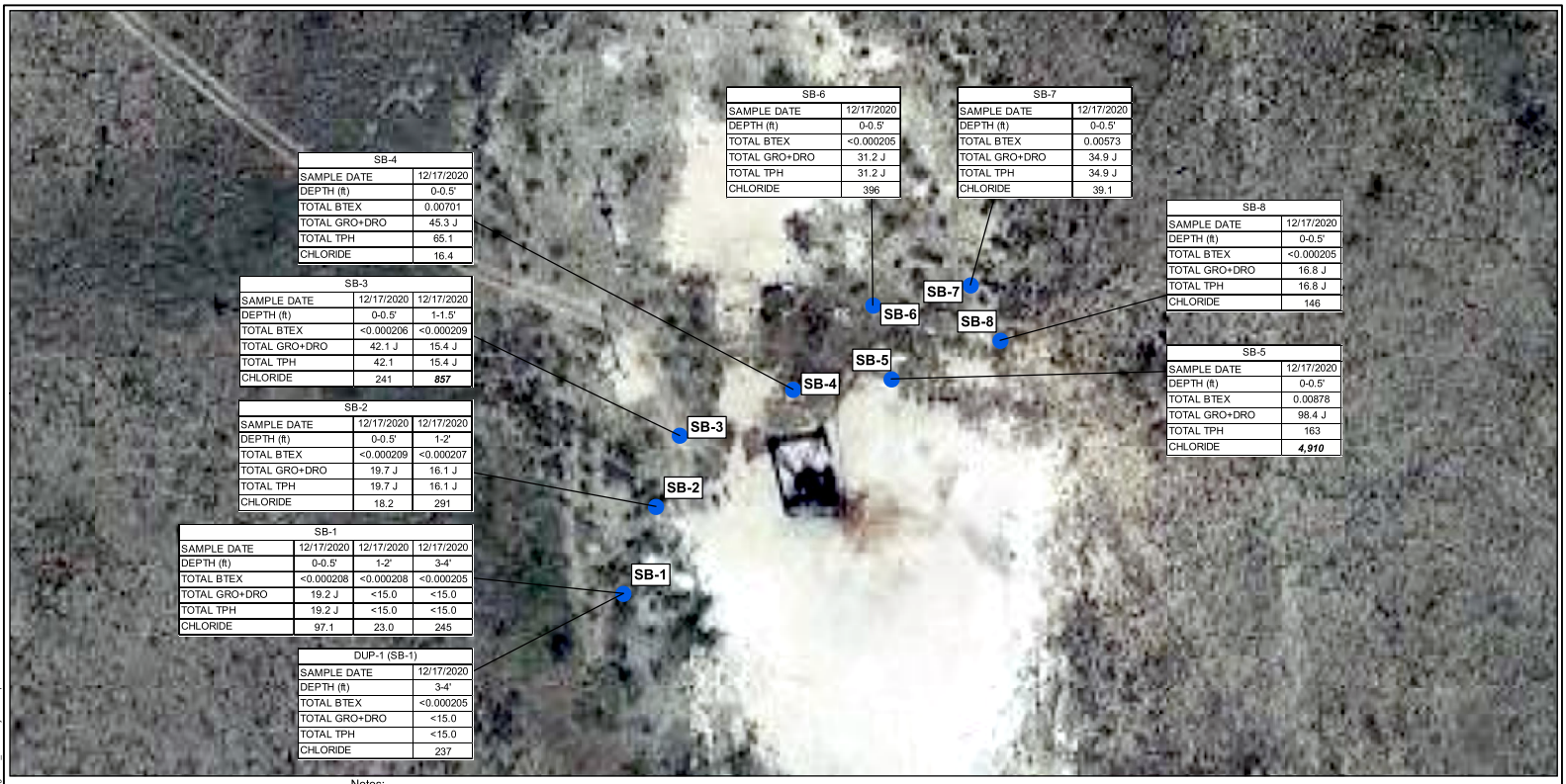
Chevron Environmental Management Company
N Vacuum Abo West 23
Lea County, New Mexico

SOIL SAMPLE LOCATIONS MAP

ARCADIS

FIGURE 2

Path: T:_ENV\Chevron\Chevron_NVacuumAboWest23MXD\Figure 2_Soil Sample Locations.mxd; 2/10/2021; 11:56:31 AM



LEGEND:

- Soil Sample Locations

NOTES:
1. Datum: GCS_WGS_1984
2. Site Location: 32.797328, -103.554933

Notes:
1. ***BOLD*** = *Analytes exceeding NMAC standards and restoration requirements for Chloride*
2. '<' Indicates the analyte was not detected at or above the Method Detection Limit (MDL).
3. J Indicates Result is less than the Reporting Limit but greater than or equal to the MDL and the concentration is an approximate value.
4. NMAC Indicates New Mexico Administration Code.
5. All values are in mg/kg (Milligram per Kilogram).
6. "' " Indicates one foot.
7. BTEX Indicates Benzene, Toluene, Ethylbenzene, and Total Xylenes.
8. TPH GRO Indicates Total Petroleum Hydrocarbons Gasoline Range Organics.
9. TPH MRO Indicates Total Petroluem Hydrocarbons Motor Oil Range Organics.
10. TPH DRO Indicates Total Petroleum Hydrocarbon Diesel Range Organics.
11. *Revised screening limit and restoration criteria within the first 4 feet below ground surface per Rule 19.15.29 effective August 14, 2018
12. DUP : Duplicate sample
13. Chloride analyzed by USEPA Method 300.0.
14. TPH analyzed by TPH by SW8015 Mod DRO/ MRO Method.
15. BTEX analyzed by USEPA Method 8260C.
16. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2).

N

0 25 50 100 Feet

Chevron Environmental Management Company
N Vacuum Abo West 23
Lea County, New Mexico

SOIL ANALYTICAL RESULTS MAP

ARCADIS

FIGURE 3

Path: T:_ENV\Chevron\Chevron_NVacuumAboWest23\MXD\Figure 3_Soil Analytical Map.mxd, 2/10/2021, 1:01:29 PM

Appendix A

Initial C-141 Form 1RP-2424

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Chevron Mid-Continent LP	Contact Kim Klahsen
Address HCR 60 Box 423 Lovington, NM 88260	Telephone No. 505-396-4414 X 128 432-894-3298 (Cell)
Facility Name North Vacuum ABO West #23	Facility Type Well NVAW #23

Surface Owner Fred Pearce	Mineral Owner	Lease No.1576

LOCATION OF RELEASE

Chloride concentration ~ 10000 ppm

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	34	17S	34 E					Lea

Latitude N. 32.78796 **Longitude** W 103.14752

NATURE OF RELEASE

API # 30-025-24050-00-00

Type of Release Oil and produced water	Volume of Release 3.03 oil / 7.43 water (bbl)	Volume Recovered 9 bbl
Source of Release Flow line separation from nipple	Date and Hour of Occurrence: 1-28-09 8:00 AM	Date and Hour of Discovery: 1-28-09 10:00 AM
Was Immediate Notice Given? Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom? Kim Klahsen	Date and Hour : By transmission and receipt of this C-141 Notice	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NONE	

If a Watercourse was Impacted, Describe Fully.*
No Impact to watercourse.

WATER @ 58'

Describe Cause of Problem and Remedial Action Taken.*

A frozen plug formed in the flow line causing the release when the flow line burst. Water pooled on the surface in an area about 1600 square feet. A vacuum truck was immediately dispatched to recover the pooled water.

Describe Area Affected and Cleanup Action Taken.*

The Vacuum truck recovered approximately 9 bbls of oil and produced water. Surface soil will be removed with a backhoe.

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:	OIL CONSERVATION DIVISION
Printed Name: Kim Klahsen	Approved by ~~District Supervisor:~~ ENV ENGINEER: Geoffrey Leking
Title: HES Specialist	Approval Date: 02/15/10 Expiration Date: 04/15/10
E-mail Address: KDKL@chevron.com	Conditions of Approval: DELINEATION TO CLEAN +1 IS NECESSARY. RETURN TO SITE AND COLLECT THE SAMPLES. REMEDIATE IF NECESSARY TO NMOCD LIMITS. Attached ☐

fGRL1006729873

IRP-10-2-2424

Appendix B

Boring Log

Date Start/Finish: 12/17/2020 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 5' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-1 **Client:** Chevron **Location:** N Vacuum Abo West 23

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 10YR 7/3 very pale brown, very fine to fine sand, moderately sorted, very silty, with little to some caliche pebbles to cobbles, hard, well cemented, subangular throughout, trace roots, no odor, dry. USCS - SM
1	1-2'		Sandy clay, 7.5YR 4/3 brown, nonpliable, non-plastic, firm to blocky, with some to abundant very fine to fine sand throughout, dry, no odor. at 2.5' color change to 2.5YR 5/6 red. USCS - CL
3	3-4'		Clayey sand 2.5YR 5/6 red, very fine to fine sand, moderately sorted, silty, with some to abundant clay, non-plastic, non-pliable, homogeneous throughout, dry, blocky to firm. USCS - SC
5			End of boring 5' bgs. caliche bottom

ARCADIS

Remarks: Total Depth: 5' Below Ground Surface (bgs)

Project: 30064855 Template: LPTEMPLATE_HA_Final

Data File: SB-1 Date: 2/11/2021 Created/Edited by: AD

Appendix C

Laboratory Report

eurofins | Environment Testing Xenco

Analytical Report 681726

for

ARCADIS

Project Manager: Douglas Jordan

ABO W 23

60012666

01.11.2021

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

01.11.2021

Project Manager: **Douglas Jordan**
ARCADIS
1004 N. Big Spring St.
Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **681726**
ABO W 23
Project Address: Abo W 23 PN 30064B55

Douglas Jordan:

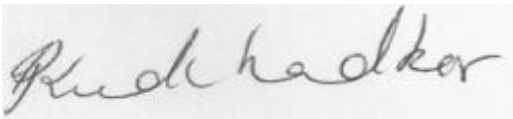
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 681726. All results being reported under this Report Number apply to the samples analyzed and properly identified 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 Eurofins Xenco, LLC. 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. 681726 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,



Sachin Kudchadkar
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1-S-0-.5-201217	S	12.17.2020 12:16		681726-001
SB-1-S-1-2-201217	S	12.17.2020 12:22		681726-002
SB-1-S-3-4-201217	S	12.17.2020 12:33		681726-003
SB-1-SD-3-4-201217	S	12.17.2020 00:00		681726-004
SB-2-S-0-.5-201217	S	12.17.2020 12:52		681726-005
SB-4-S-0-.5-201217	S	12.17.2020 13:27		681726-006
SB-3-S-0-.5-201217	S	12.17.2020 13:08		681726-007
SB-3-S-1-1.5-201217	S	12.17.2020 13:20		681726-008
SB-2-.S-1-2-201217	S	12.17.2020 12:59		681726-009
SB-5-S-0-.5-201217	S	12.17.2020 13:49		681726-010
SB-6-S-0-.5-201217	S	12.17.2020 14:10		681726-011
SB-7-S-0-.5-201217	S	12.17.2020 14:27		681726-012
SB-8-5-0-.5-201217	S	12.17.2020 14:35		681726-013

eurofins | Environment Testing Xenco

CASE NARRATIVE

Client Name: ARCADIS

Project Name: ABO W 23

Project ID: *60012666*
Work Order Number(s): *681726*

Report Date: *01.11.2021*
Date Received: *12.18.2020*

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

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-001 Date Collected: 12.17.2020 12:16

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.20.2020 10:30 % Moisture:

Seq Number: 3145511 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**97.1**	5.00	0.858	mg/kg	12.20.2020 12:31		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**19.2**	50.0	15.0	mg/kg	12.19.2020 00:09	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.19.2020 00:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 00:09	U	1
Total TPH	PHC635	**19.2**	50.0	15.0	mg/kg	12.19.2020 00:09	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	12.19.2020 00:09	
o-Terphenyl	84-15-1	91	%	70-130	12.19.2020 00:09	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-S-0-.5-201217**
Lab Sample Id: 681726-001

Matrix: Solid
Date Collected: 12.17.2020 12:16

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146519

Date Prep: 12.29.2020 17:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00101	0.000208	mg/kg	12.30.2020 04:26	U	1
Toluene	108-88-3	<0.00101	0.00503	0.00101	mg/kg	12.30.2020 04:26	U	1
Ethylbenzene	100-41-4	<0.000338	0.00101	0.000338	mg/kg	12.30.2020 04:26	U	1
m,p-Xylenes	179601-23-1	<0.000805	0.00201	0.000805	mg/kg	12.30.2020 04:26	U	1
o-Xylene	95-47-6	<0.000991	0.00101	0.000991	mg/kg	12.30.2020 04:26	U	1
Total Xylenes	1330-20-7	<0.000805	0.00101	0.000805	mg/kg	12.30.2020 04:26	U	1
Total BTEX		<0.000208	0.00101	0.000208	mg/kg	12.30.2020 04:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	12.30.2020 04:26	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	12.30.2020 04:26	
Toluene-D8	2037-26-5	92	%	70-130	12.30.2020 04:26	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-S-1-2-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-002 Date Collected: 12.17.2020 12:22

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.20.2020 10:30 % Moisture:

Seq Number: 3145511 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.0**	5.00	0.858	mg/kg	12.20.2020 12:37		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	12.19.2020 00:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.19.2020 00:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 00:29	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	12.19.2020 00:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	12.19.2020 00:29	
o-Terphenyl	84-15-1	104	%	70-130	12.19.2020 00:29	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-S-1-2-201217**
Lab Sample Id: 681726-002

Matrix: Solid
Date Collected: 12.17.2020 12:22

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146519

Date Prep: 12.29.2020 17:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00100	0.000208	mg/kg	12.30.2020 04:48	U	1
Toluene	108-88-3	<0.00100	0.00502	0.00100	mg/kg	12.30.2020 04:48	U	1
Ethylbenzene	100-41-4	<0.000337	0.00100	0.000337	mg/kg	12.30.2020 04:48	U	1
m,p-Xylenes	179601-23-1	<0.000803	0.00201	0.000803	mg/kg	12.30.2020 04:48	U	1
o-Xylene	95-47-6	<0.000989	0.00100	0.000989	mg/kg	12.30.2020 04:48	U	1
Total Xylenes	1330-20-7	<0.000803	0.00100	0.000803	mg/kg	12.30.2020 04:48	U	1
Total BTEX		<0.000208	0.00100	0.000208	mg/kg	12.30.2020 04:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	12.30.2020 04:48	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	12.30.2020 04:48	
Toluene-D8	2037-26-5	94	%	70-130	12.30.2020 04:48	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-S-3-4-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-003 Date Collected: 12.17.2020 12:33

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**245**	4.96	0.852	mg/kg	12.21.2020 19:44		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	12.19.2020 00:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	12.19.2020 00:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	12.19.2020 00:48	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	12.19.2020 00:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	12.19.2020 00:48	
o-Terphenyl	84-15-1	99	%	70-130	12.19.2020 00:48	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-S-3-4-201217**
Lab Sample Id: 681726-003

Matrix: Solid
Date Collected: 12.17.2020 12:33

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146519

Date Prep: 12.29.2020 17:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000990	0.000205	mg/kg	12.30.2020 05:08	U	1
Toluene	108-88-3	<0.000990	0.00495	0.000990	mg/kg	12.30.2020 05:08	U	1
Ethylbenzene	100-41-4	<0.000332	0.000990	0.000332	mg/kg	12.30.2020 05:08	U	1
m,p-Xylenes	179601-23-1	<0.000792	0.00198	0.000792	mg/kg	12.30.2020 05:08	U	1
o-Xylene	95-47-6	<0.000975	0.000990	0.000975	mg/kg	12.30.2020 05:08	U	1
Total Xylenes	1330-20-7	<0.000792	0.000990	0.000792	mg/kg	12.30.2020 05:08	U	1
Total BTEX		<0.000205	0.000990	0.000205	mg/kg	12.30.2020 05:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	12.30.2020 05:08	
1,2-Dichloroethane-D4	17060-07-0	106	%	53-150	12.30.2020 05:08	
Toluene-D8	2037-26-5	103	%	70-130	12.30.2020 05:08	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-SD-3-4-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-004 Date Collected: 12.17.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**237**	4.98	0.855	mg/kg	12.21.2020 19:49		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	12.19.2020 01:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.19.2020 01:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 01:27	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	12.19.2020 01:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	12.19.2020 01:27	
o-Terphenyl	84-15-1	120	%	70-130	12.19.2020 01:27	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-1-SD-3-4-201217**
Lab Sample Id: 681726-004

Matrix: Solid
Date Collected: 12.17.2020 00:00

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146519

Date Prep: 12.29.2020 17:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000205	0.000990	0.000205	mg/kg	12.30.2020 05:32	U	1
Toluene	108-88-3	<0.000990	0.00495	0.000990	mg/kg	12.30.2020 05:32	U	1
Ethylbenzene	100-41-4	<0.000332	0.000990	0.000332	mg/kg	12.30.2020 05:32	U	1
m,p-Xylenes	179601-23-1	<0.000792	0.00198	0.000792	mg/kg	12.30.2020 05:32	U	1
o-Xylene	95-47-6	<0.000975	0.000990	0.000975	mg/kg	12.30.2020 05:32	U	1
Total Xylenes	1330-20-7	<0.000792	0.000990	0.000792	mg/kg	12.30.2020 05:32	U	1
Total BTEX		<0.000205	0.000990	0.000205	mg/kg	12.30.2020 05:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	12.30.2020 05:32	
1,2-Dichloroethane-D4	17060-07-0	105	%	53-150	12.30.2020 05:32	
Toluene-D8	2037-26-5	102	%	70-130	12.30.2020 05:32	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-2-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-005 Date Collected: 12.17.2020 12:52

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.2**	5.00	0.858	mg/kg	12.21.2020 19:54		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**19.7**	50.0	15.0	mg/kg	12.19.2020 01:46	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.19.2020 01:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 01:46	U	1
Total TPH	PHC635	**19.7**	50.0	15.0	mg/kg	12.19.2020 01:46	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	12.19.2020 01:46	
o-Terphenyl	84-15-1	91	%	70-130	12.19.2020 01:46	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-2-S-0-.5-201217**
Lab Sample Id: 681726-005

Matrix: Solid
Date Collected: 12.17.2020 12:52

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146519

Date Prep: 12.29.2020 17:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000209	0.00101	0.000209	mg/kg	12.30.2020 05:50	U	1
Toluene	108-88-3	<0.00101	0.00504	0.00101	mg/kg	12.30.2020 05:50	U	1
Ethylbenzene	100-41-4	<0.000338	0.00101	0.000338	mg/kg	12.30.2020 05:50	U	1
m,p-Xylenes	179601-23-1	<0.000806	0.00202	0.000806	mg/kg	12.30.2020 05:50	U	1
o-Xylene	95-47-6	<0.000993	0.00101	0.000993	mg/kg	12.30.2020 05:50	U	1
Total Xylenes	1330-20-7	<0.000806	0.00101	0.000806	mg/kg	12.30.2020 05:50	U	1
Total BTEX		<0.000209	0.00101	0.000209	mg/kg	12.30.2020 05:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	53-142	12.30.2020 05:50	
1,2-Dichloroethane-D4	17060-07-0	112	%	53-150	12.30.2020 05:50	
Toluene-D8	2037-26-5	100	%	70-130	12.30.2020 05:50	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-4-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-006 Date Collected: 12.17.2020 13:27

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.4**	5.05	0.867	mg/kg	12.21.2020 20:10		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**17.1**	49.9	15.0	mg/kg	12.19.2020 02:06	J	1
Diesel Range Organics (DRO)	C10C28DRO	**28.2**	49.9	15.0	mg/kg	12.19.2020 02:06	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**19.8**	49.9	15.0	mg/kg	12.19.2020 02:06	J	1
Total TPH	PHC635	**65.1**	49.9	15.0	mg/kg	12.19.2020 02:06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	12.19.2020 02:06	
o-Terphenyl	84-15-1	98	%	70-130	12.19.2020 02:06	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-4-S-0-.5-201217**
Lab Sample Id: 681726-006

Matrix: Solid
Date Collected: 12.17.2020 13:27

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146519

Date Prep: 12.29.2020 17:30

Prep Method: SW5035A

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000209	0.00101	0.000209	mg/kg	12.30.2020 06:11	U	1
Toluene	108-88-3	<0.00101	0.00505	0.00101	mg/kg	12.30.2020 06:11	U	1
Ethylbenzene	100-41-4	**0.00107**	0.00101	0.000339	mg/kg	12.30.2020 06:11		1
m,p-Xylenes	179601-23-1	**0.00432**	0.00202	0.000808	mg/kg	12.30.2020 06:11		1
o-Xylene	95-47-6	**0.00162**	0.00101	0.000995	mg/kg	12.30.2020 06:11		1
Total Xylenes	1330-20-7	**0.00594**	0.00101	0.000808	mg/kg	12.30.2020 06:11		1
Total BTEX		**0.00701**	0.00101	0.000209	mg/kg	12.30.2020 06:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	12.30.2020 06:11	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	12.30.2020 06:11	
Toluene-D8	2037-26-5	107	%	70-130	12.30.2020 06:11	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-3-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-007 Date Collected: 12.17.2020 13:08

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**241**	4.96	0.852	mg/kg	12.21.2020 20:15		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.3**	49.8	14.9	mg/kg	12.19.2020 02:25	J	1
Diesel Range Organics (DRO)	C10C28DRO	**25.8**	49.8	14.9	mg/kg	12.19.2020 02:25	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	12.19.2020 02:25	U	1
Total TPH	PHC635	**42.1**	49.8	14.9	mg/kg	12.19.2020 02:25	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	12.19.2020 02:25	
o-Terphenyl	84-15-1	98	%	70-130	12.19.2020 02:25	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-3-S-0-.5-201217**
Lab Sample Id: 681726-007

Matrix: Solid
Date Collected: 12.17.2020 13:08

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000994	0.000994	0.000206	mg/kg	12.30.2020 13:26	U	1
Toluene	108-88-3	<0.00497	0.00497	0.000994	mg/kg	12.30.2020 13:26	U	1
Ethylbenzene	100-41-4	<0.000994	0.000994	0.000334	mg/kg	12.30.2020 13:26	U	1
m,p-Xylenes	179601-23-1	<0.00199	0.00199	0.000795	mg/kg	12.30.2020 13:26	U	1
o-Xylene	95-47-6	<0.000994	0.000994	0.000979	mg/kg	12.30.2020 13:26	U	1
Total Xylenes	1330-20-7	<0.000994	0.000994	0.000795	mg/kg	12.30.2020 13:26	U	1
Total BTEX		<0.000994	0.000994	0.000206	mg/kg	12.30.2020 13:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	12.30.2020 13:26	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	12.30.2020 13:26	
Toluene-D8	2037-26-5	100	%	70-130	12.30.2020 13:26	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-3-S-1-1.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-008 Date Collected: 12.17.2020 13:20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**857**	24.9	4.27	mg/kg	12.21.2020 20:31		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**15.4**	50.0	15.0	mg/kg	12.19.2020 02:45	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.19.2020 02:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 02:45	U	1
Total TPH	PHC635	**15.4**	50.0	15.0	mg/kg	12.19.2020 02:45	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	12.19.2020 02:45	
o-Terphenyl	84-15-1	103	%	70-130	12.19.2020 02:45	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-3-S-1-1.5-201217**
Lab Sample Id: 681726-008

Matrix: Solid
Date Collected: 12.17.2020 13:20

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00101	0.00101	0.000209	mg/kg	12.30.2020 13:47	U	1
Toluene	108-88-3	<0.00504	0.00504	0.00101	mg/kg	12.30.2020 13:47	U	1
Ethylbenzene	100-41-4	<0.00101	0.00101	0.000338	mg/kg	12.30.2020 13:47	U	1
m,p-Xylenes	179601-23-1	<0.00202	0.00202	0.000806	mg/kg	12.30.2020 13:47	U	1
o-Xylene	95-47-6	<0.00101	0.00101	0.000993	mg/kg	12.30.2020 13:47	U	1
Total Xylenes	1330-20-7	<0.00101	0.00101	0.000806	mg/kg	12.30.2020 13:47	U	1
Total BTEX		<0.00101	0.00101	0.000209	mg/kg	12.30.2020 13:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	53-142	12.30.2020 13:47	
1,2-Dichloroethane-D4	17060-07-0	103	%	53-150	12.30.2020 13:47	
Toluene-D8	2037-26-5	101	%	70-130	12.30.2020 13:47	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-2-.S-1-2-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-009 Date Collected: 12.17.2020 12:59

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**291**	5.03	0.864	mg/kg	12.21.2020 20:36		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.1**	50.0	15.0	mg/kg	12.19.2020 03:04	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.19.2020 03:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 03:04	U	1
Total TPH	PHC635	**16.1**	50.0	15.0	mg/kg	12.19.2020 03:04	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	12.19.2020 03:04	
o-Terphenyl	84-15-1	100	%	70-130	12.19.2020 03:04	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-2-.S-1-2-201217**
Lab Sample Id: 681726-009

Matrix: Solid
Date Collected: 12.17.2020 12:59

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000998	0.000998	0.000207	mg/kg	12.30.2020 13:05	U	1
Toluene	108-88-3	<0.00499	0.00499	0.000998	mg/kg	12.30.2020 13:05	U	1
Ethylbenzene	100-41-4	<0.000998	0.000998	0.000335	mg/kg	12.30.2020 13:05	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	0.000798	mg/kg	12.30.2020 13:05	U	1
o-Xylene	95-47-6	<0.000998	0.000998	0.000983	mg/kg	12.30.2020 13:05	U	1
Total Xylenes	1330-20-7	<0.000998	0.000998	0.000798	mg/kg	12.30.2020 13:05	U	1
Total BTEX		<0.000998	0.000998	0.000207	mg/kg	12.30.2020 13:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	53-142	12.30.2020 13:05	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	12.30.2020 13:05	
Toluene-D8	2037-26-5	109	%	70-130	12.30.2020 13:05	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-5-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-010 Date Collected: 12.17.2020 13:49

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4910**	49.8	8.55	mg/kg	12.21.2020 20:41		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**18.3**	49.9	15.0	mg/kg	12.19.2020 03:23	J	1
Diesel Range Organics (DRO)	C10C28DRO	**80.1**	49.9	15.0	mg/kg	12.19.2020 03:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**64.7**	49.9	15.0	mg/kg	12.19.2020 03:23		1
Total TPH	PHC635	**163**	49.9	15.0	mg/kg	12.19.2020 03:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	12.19.2020 03:23	
o-Terphenyl	84-15-1	100	%	70-130	12.19.2020 03:23	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-5-S-0-.5-201217**
Lab Sample Id: 681726-010

Matrix: Solid
Date Collected: 12.17.2020 13:49

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	0.000208	mg/kg	12.30.2020 14:17	U	1
Toluene	108-88-3	<0.00502	0.00502	0.00100	mg/kg	12.30.2020 14:17	U	1
Ethylbenzene	100-41-4	**0.00136**	0.00100	0.000337	mg/kg	12.30.2020 14:17		1
m,p-Xylenes	179601-23-1	**0.00531**	0.00201	0.000803	mg/kg	12.30.2020 14:17		1
o-Xylene	95-47-6	**0.00211**	0.00100	0.000989	mg/kg	12.30.2020 14:17		1
Total Xylenes	1330-20-7	**0.00742**	0.00100	0.000803	mg/kg	12.30.2020 14:17		1
Total BTEX		**0.00878**	0.00100	0.000208	mg/kg	12.30.2020 14:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	53-142	12.30.2020 14:17	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	12.30.2020 14:17	
Toluene-D8	2037-26-5	109	%	70-130	12.30.2020 14:17	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-6-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-011 Date Collected: 12.17.2020 14:10

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**396**	50.0	8.58	mg/kg	12.21.2020 20:47		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**15.2**	49.8	14.9	mg/kg	12.19.2020 03:43	J	1
Diesel Range Organics (DRO)	C10C28DRO	**16.0**	49.8	14.9	mg/kg	12.19.2020 03:43	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	12.19.2020 03:43	U	1
Total TPH	PHC635	**31.2**	49.8	14.9	mg/kg	12.19.2020 03:43	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	12.19.2020 03:43	
o-Terphenyl	84-15-1	99	%	70-130	12.19.2020 03:43	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-6-S-0-.5-201217**
Lab Sample Id: 681726-011

Matrix: Solid
Date Collected: 12.17.2020 14:10

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	0.000205	mg/kg	12.30.2020 14:28	U	1
Toluene	108-88-3	<0.00495	0.00495	0.000990	mg/kg	12.30.2020 14:28	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	0.000332	mg/kg	12.30.2020 14:28	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	0.000792	mg/kg	12.30.2020 14:28	U	1
o-Xylene	95-47-6	<0.000990	0.000990	0.000975	mg/kg	12.30.2020 14:28	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	0.000792	mg/kg	12.30.2020 14:28	U	1
Total BTEX		<0.000990	0.000990	0.000205	mg/kg	12.30.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	53-142	12.30.2020 14:28	
1,2-Dichloroethane-D4	17060-07-0	111	%	53-150	12.30.2020 14:28	
Toluene-D8	2037-26-5	97	%	70-130	12.30.2020 14:28	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-7-S-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-012 Date Collected: 12.17.2020 14:27

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.1**	25.2	4.33	mg/kg	12.21.2020 20:52		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.3**	50.0	15.0	mg/kg	12.19.2020 04:02	J	1
Diesel Range Organics (DRO)	C10C28DRO	**18.6**	50.0	15.0	mg/kg	12.19.2020 04:02	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.19.2020 04:02	U	1
Total TPH	PHC635	**34.9**	50.0	15.0	mg/kg	12.19.2020 04:02	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	12.19.2020 04:02	
o-Terphenyl	84-15-1	95	%	70-130	12.19.2020 04:02	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-7-S-0-.5-201217**
Lab Sample Id: 681726-012

Matrix: Solid
Date Collected: 12.17.2020 14:27

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	0.000207	mg/kg	12.30.2020 14:49	U	1
Toluene	108-88-3	<0.00500	0.00500	0.00100	mg/kg	12.30.2020 14:49	U	1
Ethylbenzene	100-41-4	**0.00178**	0.00100	0.000336	mg/kg	12.30.2020 14:49		1
m,p-Xylenes	179601-23-1	**0.00279**	0.00200	0.000800	mg/kg	12.30.2020 14:49		1
o-Xylene	95-47-6	**0.00116**	0.00100	0.000985	mg/kg	12.30.2020 14:49		1
Total Xylenes	1330-20-7	**0.00395**	0.00100	0.000800	mg/kg	12.30.2020 14:49		1
Total BTEX		**0.00573**	0.00100	0.000207	mg/kg	12.30.2020 14:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	53-142	12.30.2020 14:49	
1,2-Dichloroethane-D4	17060-07-0	108	%	53-150	12.30.2020 14:49	
Toluene-D8	2037-26-5	97	%	70-130	12.30.2020 14:49	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-8-5-0-.5-201217** Matrix: Solid Date Received:12.18.2020 09:19

Lab Sample Id: 681726-013 Date Collected: 12.17.2020 14:35

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00 % Moisture:

Seq Number: 3145641 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**146**	4.96	0.852	mg/kg	12.21.2020 20:57		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00 % Moisture:

Seq Number: 3145525 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.8**	49.9	15.0	mg/kg	12.19.2020 04:22	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	12.19.2020 04:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	12.19.2020 04:22	U	1
Total TPH	PHC635	**16.8**	49.9	15.0	mg/kg	12.19.2020 04:22	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	12.19.2020 04:22	
o-Terphenyl	84-15-1	100	%	70-130	12.19.2020 04:22	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **SB-8-5-0-.5-201217**
Lab Sample Id: 681726-013

Matrix: Solid
Date Collected: 12.17.2020 14:35

Date Received:12.18.2020 09:19

Analytical Method: BTEX by SW 8260C
Tech: NGA
Analyst: NGA
Seq Number: 3146479

Date Prep: 12.30.2020 12:30

Prep Method: SW5035A
% Moisture:
Basis: Wet Weight
SUB: T104704215-20-38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000990	0.000990	0.000205	mg/kg	12.30.2020 15:10	U	1
Toluene	108-88-3	<0.00495	0.00495	0.000990	mg/kg	12.30.2020 15:10	U	1
Ethylbenzene	100-41-4	<0.000990	0.000990	0.000332	mg/kg	12.30.2020 15:10	U	1
m,p-Xylenes	179601-23-1	<0.00198	0.00198	0.000792	mg/kg	12.30.2020 15:10	U	1
o-Xylene	95-47-6	<0.000990	0.000990	0.000975	mg/kg	12.30.2020 15:10	U	1
Total Xylenes	1330-20-7	<0.000990	0.000990	0.000792	mg/kg	12.30.2020 15:10	U	1
Total BTEX		<0.000990	0.000990	0.000205	mg/kg	12.30.2020 15:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	53-142	12.30.2020 15:10	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	12.30.2020 15:10	
Toluene-D8	2037-26-5	99	%	70-130	12.30.2020 15:10	

eurofins | Environment Testing Xenco

Blank Summary 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **7717545-1-BLK** Matrix: SOLID

Lab Sample Id: **7717545-1-BLK**

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.20.2020 10:30

Seq Number: 3145511

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	12.20.2020 10:47	U	1

eurofins | Environment Testing Xenco

Blank Summary 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **7717565-1-BLK** Matrix: SOLID

Lab Sample Id: **7717565-1-BLK**

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 12.18.2020 16:00

Seq Number: 3145525

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	12.18.2020 20:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	12.18.2020 20:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	12.18.2020 20:16	U	1

eurofins | Environment Testing Xenco

Blank Summary 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **7717598-1-BLK** Matrix: SOLID

Lab Sample Id: **7717598-1-BLK**

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 12.21.2020 16:00

Seq Number: 3145641

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	12.21.2020 18:26	U	1

eurofins | Environment Testing Xenco

Blank Summary 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **7718229-1-BLK** Matrix: SOLID

Lab Sample Id: **7718229-1-BLK**

Analytical Method: **BTEX by SW 8260C** Prep Method: SW5035A

Tech: NGA

Analyst: NGA Date Prep: 12.30.2020 12:30 **SUB: T104704215-20-38**

Seq Number: 3146479

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00100	0.00100	0.000207	mg/kg	12.30.2020 12:44	U	1
Toluene	108-88-3	<0.00500	0.00500	0.00100	mg/kg	12.30.2020 12:44	U	1
Ethylbenzene	100-41-4	<0.00100	0.00100	0.000336	mg/kg	12.30.2020 12:44	U	1
m,p-Xylenes	179601-23-1	<0.00200	0.00200	0.000800	mg/kg	12.30.2020 12:44	U	1
o-Xylene	95-47-6	<0.00100	0.00100	0.000985	mg/kg	12.30.2020 12:44	U	1

eurofins | Environment Testing Xenco

Blank Summary 681726

ARCADIS, Midland, TX

ABO W 23

Sample Id: **7718255-1-BLK** Matrix: SOLID

Lab Sample Id: **7718255-1-BLK**

Analytical Method: **BTEX by SW 8260C** Prep Method: SW5035A

Tech: NGA

Analyst: NGA Date Prep: 12.29.2020 17:30

Seq Number: 3146519 **SUB: T104704215-20-38**

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000207	0.00100	0.000207	mg/kg	12.30.2020 00:57	U	1
Toluene	108-88-3	<0.00100	0.00500	0.00100	mg/kg	12.30.2020 00:57	U	1
Ethylbenzene	100-41-4	<0.000336	0.00100	0.000336	mg/kg	12.30.2020 00:57	U	1
m,p-Xylenes	179601-23-1	<0.000800	0.00200	0.000800	mg/kg	12.30.2020 00:57	U	1
o-Xylene	95-47-6	<0.000985	0.00100	0.000985	mg/kg	12.30.2020 00:57	U	1

eurofins | Environment Testing Xenco

Form 2 - Surrogate Recoveries

Project Name: ABO W 23

Report Date: 01112021

Work Orders : 681726 **Project ID:** 60012666

Lab Batch #: 3146479 **Sample:** 7718229-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.30.2020 10:38 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0501	0.0500	100	53-142	
1,2-Dichloroethane-D4	0.0535	0.0500	107	53-150	
Toluene-D8	0.0479	0.0500	96	70-130	

Lab Batch #: 3146479 **Sample:** 7718229-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.30.2020 10:59 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0512	0.0500	102	53-142	
1,2-Dichloroethane-D4	0.0543	0.0500	109	53-150	
Toluene-D8	0.0476	0.0500	95	70-130	

Lab Batch #: 3146479 **Sample:** 681726-009 S / MS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.30.2020 11:20 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0511	0.0500	102	53-142	
1,2-Dichloroethane-D4	0.0529	0.0500	106	53-150	
Toluene-D8	0.0442	0.0500	88	70-130	

Lab Batch #: 3146479 **Sample:** 681726-009 SD / MSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.30.2020 11:47 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0512	0.0500	102	53-142	
1,2-Dichloroethane-D4	0.0562	0.0500	112	53-150	
Toluene-D8	0.0491	0.0500	98	70-130	

* 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.

eurofins | Environment Testing Xenco

Form 2 - Surrogate Recoveries

Project Name: ABO W 23

Report Date: 01112021

Work Orders : 681726 **Project ID:** 60012666

Lab Batch #: 3146479 **Sample:** 7718229-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.30.2020 12:44 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0495	0.0500	99	53-142	
1,2-Dichloroethane-D4	0.0547	0.0500	109	53-150	
Toluene-D8	0.0458	0.0500	92	70-130	

Lab Batch #: 3146519 **Sample:** 7718255-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.29.2020 22:31 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0500	0.0500	100	53-142	
1,2-Dichloroethane-D4	0.0546	0.0500	109	53-150	
Toluene-D8	0.0485	0.0500	97	70-130	

Lab Batch #: 3146519 **Sample:** 7718255-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.29.2020 22:52 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0490	0.0500	98	53-142	
1,2-Dichloroethane-D4	0.0559	0.0500	112	53-150	
Toluene-D8	0.0507	0.0500	101	70-130	

Lab Batch #: 3146519 **Sample:** 681950-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12.29.2020 23:13 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0506	0.0500	101	53-142	
1,2-Dichloroethane-D4	0.0527	0.0500	105	53-150	
Toluene-D8	0.0486	0.0500	97	70-130	

* 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.

eurofins | Environment Testing Xenco

Form 2 - Surrogate Recoveries

Project Name: ABO W 23

Report Date: 01112021

Work Orders : 681726 **Project ID:** 60012666

Lab Batch #: 3146519 **Sample:** 681950-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12.29.2020 23:34 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0520	0.0500	104	53-142	
1,2-Dichloroethane-D4	0.0528	0.0500	106	53-150	
Toluene-D8	0.0512	0.0500	102	70-130	

Lab Batch #: 3146519 **Sample:** 7718255-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.30.2020 00:57 **SURROGATE RECOVERY STUDY**

BTEX by SW 8260C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0500	0.0500	100	53-142	
1,2-Dichloroethane-D4	0.0560	0.0500	112	53-150	
Toluene-D8	0.0481	0.0500	96	70-130	

Lab Batch #: 3145525 **Sample:** 7717565-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.18.2020 20:16 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-130	
o-Terphenyl	55.2	50.0	110	70-130	

Lab Batch #: 3145525 **Sample:** 7717565-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.18.2020 20:35 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-130	
o-Terphenyl	43.3	50.0	87	70-130	

* 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.

eurofins | Environment Testing Xenco

Form 2 - Surrogate Recoveries

Project Name: ABO W 23

Report Date: 01112021

Work Orders : 681726 **Project ID:** 60012666

Lab Batch #: 3145525 **Sample:** 7717565-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12.18.2020 20:54 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-130	
o-Terphenyl	51.6	50.0	103	70-130	

Lab Batch #: 3145525 **Sample:** 681715-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12.18.2020 21:33 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	99.7	99	70-130	
o-Terphenyl	44.3	49.9	89	70-130	

Lab Batch #: 3145525 **Sample:** 681715-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12.18.2020 21:53 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.7	103	70-130	
o-Terphenyl	47.0	49.9	94	70-130	

* 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.

QC Summary 681726

eurofins | Environment Testing Xenco

ARCADIS

ABO W 23

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3145511 — Matrix: Solid — Date Prep: 12.20.2020
MB Sample Id: 7717545-1-BLK — LCS Sample Id: 7717545-1-BKS — LCSD Sample Id: 7717545-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	251	100	252	101	90-110	0	20	mg/kg	12.20.2020 10:52	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3145641 — Matrix: Solid — Date Prep: 12.21.2020
MB Sample Id: 7717598-1-BLK — LCS Sample Id: 7717598-1-BKS — LCSD Sample Id: 7717598-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	254	102	254	102	90-110	0	20	mg/kg	12.21.2020 18:31	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3145511 — Matrix: Soil — Date Prep: 12.20.2020
Parent Sample Id: 681619-001 — MS Sample Id: 681619-001 S — MSD Sample Id: 681619-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	139	252	384	97	385	98	90-110	0	20	mg/kg	12.20.2020 11:08	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3145511 — Matrix: Soil — Date Prep: 12.20.2020
Parent Sample Id: 681721-005 — MS Sample Id: 681721-005 S — MSD Sample Id: 681721-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5170	2530	8120	117	8140	117	90-110	0	20	mg/kg	12.20.2020 12:21	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3145641 — Matrix: Solid — Date Prep: 12.21.2020
Parent Sample Id: 681726-005 — MS Sample Id: 681726-005 S — MSD Sample Id: 681726-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	18.2	250	272	102	270	101	90-110	1	20	mg/kg	12.21.2020 20:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3145641 — Matrix: Soil — Date Prep: 12.21.2020
Parent Sample Id: 682049-001 — MS Sample Id: 682049-001 S — MSD Sample Id: 682049-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	29.1	248	272	98	272	98	90-110	0	20	mg/kg	12.21.2020 18:46	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery — [D] = 100 * (C) / [B]
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

eurofins | Environment Testing Xenco

QC Summary 681726

ARCADIS

ABO W 23

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145525 — Matrix: Solid — Date Prep: 12.18.2020
MB Sample Id: 7717565-1-BLK — LCS Sample Id: 7717565-1-BKS — LCSD Sample Id: 7717565-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1110	111	1080	108	70-130	3	20	mg/kg	12.18.2020 20:35	
Diesel Range Organics (DRO)	<15.0	1000	1150	115	1080	108	70-130	6	20	mg/kg	12.18.2020 20:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		130		126		70-130	%	12.18.2020 20:35
o-Terphenyl	110		87		103		70-130	%	12.18.2020 20:35

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145525 — Matrix: Solid — Date Prep: 12.18.2020
MB Sample Id: 7717565-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	12.18.2020 20:16	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145525 — Matrix: Soil — Date Prep: 12.18.2020
Parent Sample Id: 681715-001 — MS Sample Id: 681715-001 S — MSD Sample Id: 681715-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	788	79	798	80	70-130	1	20	mg/kg	12.18.2020 21:33	
Diesel Range Organics (DRO)	<15.0	997	846	85	877	88	70-130	4	20	mg/kg	12.18.2020 21:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		103		70-130	%	12.18.2020 21:33
o-Terphenyl	89		94		70-130	%	12.18.2020 21:33

Analytical Method: BTEX by SW 8260C — Prep Method: SW5035A
Seq Number: 3146519 — Matrix: Solid — Date Prep: 12.29.2020
MB Sample Id: 7718255-1-BLK — LCS Sample Id: 7718255-1-BKS — LCSD Sample Id: 7718255-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000207	0.0500	0.0481	96	0.0490	98	62-132	2	25	mg/kg	12.29.2020 22:31	
Toluene	<0.00100	0.0500	0.0473	95	0.0462	92	66-124	2	25	mg/kg	12.29.2020 22:31	
Ethylbenzene	<0.000336	0.0500	0.0469	94	0.0461	92	71-134	2	25	mg/kg	12.29.2020 22:31	
m,p-Xylenes	<0.000800	0.100	0.0935	94	0.0915	92	69-128	2	25	mg/kg	12.29.2020 22:31	
o-Xylene	<0.000985	0.0500	0.0507	101	0.0479	96	72-131	6	25	mg/kg	12.29.2020 22:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	100		100		98		53-142	%	12.29.2020 22:31
1,2-Dichloroethane-D4	112		109		112		53-150	%	12.29.2020 22:31
Toluene-D8	96		97		101		70-130	%	12.29.2020 22:31

MS/MSD Percent Recovery — [D] = 100*(C-A) / B
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery — [D] = 100 * (C) / [B]
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

eurofins | Environment Testing Xenco

QC Summary 681726

ARCADIS

ABO W 23

Analytical Method: BTEX by SW 8260C — Prep Method: SW5035A
Seq Number: 3146479 — Matrix: Solid — Date Prep: 12.30.2020
MB Sample Id: 7718229-1-BLK — LCS Sample Id: 7718229-1-BKS — LCSD Sample Id: 7718229-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.0500	0.0459	92	0.0492	98	62-132	7	25	mg/kg	12.30.2020 10:38	
Toluene	<0.00500	0.0500	0.0439	88	0.0460	92	66-124	5	25	mg/kg	12.30.2020 10:38	
Ethylbenzene	<0.00100	0.0500	0.0451	90	0.0468	94	71-134	4	25	mg/kg	12.30.2020 10:38	
m,p-Xylenes	<0.00200	0.100	0.0895	90	0.0940	94	69-128	5	25	mg/kg	12.30.2020 10:38	
o-Xylene	<0.00100	0.0500	0.0477	95	0.0483	97	72-131	1	25	mg/kg	12.30.2020 10:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	99		100		102		53-142	%	12.30.2020 10:38
1,2-Dichloroethane-D4	109		107		109		53-150	%	12.30.2020 10:38
Toluene-D8	92		96		95		70-130	%	12.30.2020 10:38

Analytical Method: BTEX by SW 8260C — Prep Method: SW5035A
Seq Number: 3146519 — Matrix: Soil — Date Prep: 12.29.2020
Parent Sample Id: 681950-001 — MS Sample Id: 681950-001 S — MSD Sample Id: 681950-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000242	0.0585	0.0525	90	0.0529	91	62-132	1	25	mg/kg	12.29.2020 23:13	
Toluene	<0.00117	0.0585	0.0502	86	0.0537	92	66-124	7	25	mg/kg	12.29.2020 23:13	
Ethylbenzene	<0.000393	0.0585	0.0508	87	0.0505	86	71-134	1	25	mg/kg	12.29.2020 23:13	
m,p-Xylenes	<0.000936	0.117	0.101	86	0.0979	84	69-128	3	25	mg/kg	12.29.2020 23:13	
o-Xylene	<0.00115	0.0585	0.0523	89	0.0519	89	72-131	1	25	mg/kg	12.29.2020 23:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	101		104		53-142	%	12.29.2020 23:13
1,2-Dichloroethane-D4	105		106		53-150	%	12.29.2020 23:13
Toluene-D8	97		102		70-130	%	12.29.2020 23:13

Analytical Method: BTEX by SW 8260C — Prep Method: SW5035A
Seq Number: 3146479 — Matrix: Solid — Date Prep: 12.30.2020
Parent Sample Id: 681726-009 — MS Sample Id: 681726-009 S — MSD Sample Id: 681726-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00101	0.0505	0.0468	93	0.0444	88	62-132	5	25	mg/kg	12.30.2020 11:20	
Toluene	<0.00505	0.0505	0.0403	80	0.0432	86	66-124	7	25	mg/kg	12.30.2020 11:20	
Ethylbenzene	<0.00101	0.0505	0.0445	88	0.0444	88	71-134	0	25	mg/kg	12.30.2020 11:20	
m,p-Xylenes	<0.00202	0.101	0.0898	89	0.0899	89	69-128	0	25	mg/kg	12.30.2020 11:20	
o-Xylene	<0.00101	0.0505	0.0459	91	0.0488	97	72-131	6	25	mg/kg	12.30.2020 11:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	102		102		53-142	%	12.30.2020 11:20
1,2-Dichloroethane-D4	106		112		53-150	%	12.30.2020 11:20
Toluene-D8	88		98		70-130	%	12.30.2020 11:20

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

eurofins | Environment Testing Xenco

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. **ND** Not Detected.

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmam	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78892-21251.1
Client Contact: ~~Justin Nixon~~ Morgan Jordan	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 o 2
Company: ARCADIS U.S., Inc.		**Analysis Requested**		Job #: 681724
Address: ~~1004 North Big Spring Suite 121~~ 1717 W 6th St Suite 210	Due Date Requested:			Preservation Codes:
City: ~~Midland~~ Austin	TAT Requested (days): Std			
State, Zip: ~~TX, 79701~~ TX 78703				
Phone: 281 644 9437	PO #: 30057161-0002B			
Email: ~~Justin.Nixon@arcadis.com~~ douglas.jordan@arcadis.com	WO #:			
Project Name: ~~Chevron - VC GB Site~~ Abo W 23	Project #: 60012666			
Site: Abo W 23 PN 30064855	SSOW#:			Other:

Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)

gp 12/17

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015D_DRO/ORO	8015D_GRO	8260C-BTEX	300- Chloride	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	X	
SB-1-S-0-.5-201217	12/17/20	1216	G	Solid								1	
SB-1-S-1-2-201217		1222		Solid									
SB-1-S-3-4-201217		1233		Solid									
SB-1-SD-3-4-201217		—		Solid									
SB-2-S-0-.5-201217		~~1259~~ 1252 (gp 12/17)		Solid									
SB-4-S-0-.5-201217		1327		Solid									
SB-3-S-0-.5-201217		1308		Solid									
SB-3-S-1-1.5-201217		1320		Solid									
~~SB-2-S-1-201217~~ SB-2-S-1-2-201217 (gp 12/17)		1259		Solid									
SB-5-S-0-.5-201217		1349		Solid									
SB-6-S-0-.5-201217		1410		Solid									

Possible Hazard Identification
Non-Hazard / Flammable / Skin Irritant / Poison B / Unknown / Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client / Disposal By Lab / Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	12/17/20 1600	Arcadis	Carlos Grajeda	12/17/20 1600	Arcadis
Carlos Grajeda	12/18/20 918	Arcadis	[signature]	12/18/20 9:19	

Custody Seals Intact: Δ Yes Δ No (circled)	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.9

Ver: 01/16/2019

Final 1.001

Page 44 of 48

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78892-21251.1
Client Contact: ~~Justin Nixon~~ Morgan Jordan	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 2 of 2
Company: ARCADIS U.S., Inc.				Job #: 6817 2d
Address: ~~1004 North Big Spring Suite 421~~ 1717 W 6th St. Suite 210	Due Date Requested:	Analysis Requested		Preservation Codes:
City: ~~Midland~~ Austin	TAT Requested (days): std			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
State, Zip: ~~TX, 79701~~ TX 78703				Other:
Phone: 281 644 9437	PO #: 30057161-0002B			
Email: Justin.Nixon@arcadis.com douglas.jordan@arcadis.com	WO #:			
Project Name: ~~Chevron - VC GB Site~~ Abo W 23	Project #: 60012666			
Site: 30064855	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015D_DRO/ORO	8015D_GRO	8260C-BTEX	300- Chloride	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		
SB-7-S-0-.5-201217	12/17/20	1427	G	Solid			1	1	1	1		1	
SB-8-S-0-.5-201217	12/17/20	1435	G	Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									

QS 12/17/20

QS 12/17

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ___ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12/17/20 1600	Arcadis	Carlos Grajeda	12/17/20 1600	Arcadis
Carlos Grajeda	12/18/20 918	Arcadis		12/18/20 9:19	

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4 / 4.9

Ver: 01/16/2019

Final 1.001

Page 45 of 48

Inter-Office Shipment

IOS Number : 75209

Date/Time:	12.18.2020	Created by:	Brianna Teel	Please send report to:	Sachin Kudchadkar
Lab# From:	**Midland**	Delivery Priority:		Address:	1211 W. Florida Ave
Lab# To:	**Houston**	Air Bill No.:		E-Mail:	

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
681726-001	S	SB-1-S-0-.5-201217	12.17.2020 12:16	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-002	S	SB-1-S-1-2-201217	12.17.2020 12:22	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-003	S	SB-1-S-3-4-201217	12.17.2020 12:33	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-004	S	SB-1-SD-3-4-201217	12.17.2020 00:00	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-005	S	SB-2-S-0-.5-201217	12.17.2020 12:52	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-006	S	SB-4-S-0-.5-201217	12.17.2020 13:27	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-007	S	SB-3-S-0-.5-201217	12.17.2020 13:08	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-008	S	SB-3-S-1-1.5-201217	12.17.2020 13:20	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-009	S	SB-2-.S-1-2-201217	12.17.2020 12:59	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-010	S	SB-5-S-0-.5-201217	12.17.2020 13:49	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-011	S	SB-6-S-0-.5-201217	12.17.2020 14:10	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-012	S	SB-7-S-0-.5-201217	12.17.2020 14:27	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	
681726-013	S	SB-8-5-0-.5-201217	12.17.2020 14:35	SW8260CBTEX	BTEX by SW 8260C	12.25.2020	12.31.2020	SGK	BZ BZME EBZ XYLENE	

Inter Office Shipment or Sample Comments:

Relinquished By: Jessica Kramer

Jessica Kramer

Date Relinquished: 12.18.2020

Received By: Hypatia Keys

Hypatia Keys

Date Received: 12.19.2020

Cooler Temperature: 0.5

Eurofins Xenco, LLC

Environment Testing Xenco

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 75209

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : hou-188

Sent By: Brianna Teel **Date Sent:** 12.18.2020 09.31 AM

Received By: Hypatia Keys **Date Received:** 12.19.2020 09.30 AM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Hypatia Keys Date: 12.19.2020

Hypatia Keys

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 12.18.2020 09.19.00 AM

Work Order #: 681726

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.9	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Xenco Stafford-BTEX8260
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 12.18.2020

Brianna Teel

Checklist reviewed by: Sachin Kudchadkar Date: 12.18.2020

Sachin Kudchadkar

Appendix D

Photographic Log

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
1	12/17/2020

Direction Photo Taken:

Facing north

Description:

Pad sign

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
2	12/17/2020

Direction Photo Taken:

North

Description:

West side of pad

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
3	12/17/2020

Direction Photo Taken:

Facing east

Description:

West of pumpjack

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
4	12/17/2020

Direction Photo Taken:

Facing southeast

Description:

North west of pump jack

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
5	12/17/2020

Direction Photo Taken:

Facing South

Description:

North of pumpjack

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
6	12/17/2020

Direction Photo Taken:

Facing west

Description:

North side of the pump jack. Spill area from the east

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
7	12/17/2020

Direction Photo Taken:

Facing west

Description:

East side of spill area from the east

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
8	12/17/2020

Direction Photo Taken:

Facing nothwest

Description:

Southeast side of the spill area from the southeast

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
N Vacuum ABO West 23	Lea County, NM	1RP-2424

Photo No.	Date:
9	12/17/2020

Direction Photo Taken:

Facing west

Description:

Splice in poly line off wellhead

Appendix E

Revised C-141 Form 1RP-2424

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 Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NGRL1006730445
District RP	1RP-2424
Facility ID	fGRL1006729873
Application ID	NA

Release Notification

Responsible Party

Responsible Party: Chevron USA	OGRID: 4323
Contact Name: Armando Martinez	Contact Telephone: 505-690-5408
Contact email: amarti@chevron.com	Incident # *(assigned by OCD)* NGRL1006730445
Contact mailing address:	

Location of Release Source

Latitude 32.538277 Longitude -103.698055

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: North Vacuum ABO West #23	Site Type: Oil Well
Date Release Discovered: 01/28/2009	API# *(if applicable):* 30-025-24050

Unit Letter	Section	Township	Range	County
D	34	17S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls): 3.03	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 7.43	Volume Recovered (bbls): 9 Total (oil & water)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release: A frozen plug formed in the flow line causing the release when the flow line burst.		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NGRL1006730445
District RP	1RP-2424
Facility ID	fGRL1006729873
Application ID	NA

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

State of New Mexico
Oil Conservation Division

Incident ID	NGRL1006730445
District RP	1RP-2424
Facility ID	fGRL1006729873
Application ID	NA

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	108 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. **Attached.**
Field data: **Attached.**
Data table of soil contaminant concentration data: **Attached.**
Depth to water determination: **>101 feet bgs**
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release: **None identified.**
Boring or excavation logs: **Boring logs attached.**
Photographs including date and GIS information: **Photographic log attached.**
Topographic/Aerial maps; **Topographic map attached.**
Laboratory data including chain of custody: **Attached.**

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NGRL1006730445
District RP	1RP-2424
Facility ID	fGRL1006729873
Application ID	NA

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Armando Martinez Title: Environmental Project Manager

Signature:_____ _____ Date: 3/9/21_____

email: ____ amarti@chevron.com _____ Telephone: 505-690-5408_____

OCD Only

Received by: _____ Date: _____

Arcadis U.S., Inc.
10205 Westheimer Road, Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620
www.arcadis.com

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 52918

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 52918
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Report accepted for information only. Proceed with additional delineation and work plan development. Submit a report by 6/9/2023.	3/7/2023