

**EL PASO WATER UTILITIES
PUBLIC SERVICE BOARD**

**ADDENDUM 1
FOR**

**CONSTRUCTION MANAGER-AT-RISK (CMAR) CONTRACTOR SERVICES
FOR WILL RUTH POND AND CONVEYANCE, PALISADES STORMWATER
SYSTEM, AND TRAILHEAD IMPROVEMENTS PROJECT**

RFP NUMBER SW 03-23

December 8, 2022

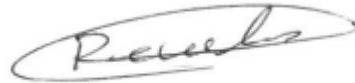
The following revision to the Request for Proposals shall become part of the Contract Documents and the Bidders shall acknowledge receipt thereof on their Proposal

El Paso Water Utilities

Arcadis U.S., Inc.



Robert L. Davidson
Contract Construction Administrator
December 8, 2022



Atzuko Reveles, P.E.
Program Manager
December 6, 2022

* The Purchasing Agent's signature certifies only that the document shall become part of the Contract Documents for the referenced project. Her signature is not a representation that the Content of this document is Technically correct.



Receipt of this Addendum must be acknowledged in writing to El Paso Water Utilities as required by the bid documents.

AD-1: PRE-PROPOSAL MEETING

I. Attachments:

The following are attached to this Addendum.

- Attachment 1: Meeting Agenda
- Attachment 2: Sign-in Sheet
- Attachment 3: Contaminated Soil Information for the Will Ruth Pond Site.

II. Questions and Answers:

QUESTION 1: Will a bid bond be required?

ANSWER 1: Yes. Upon selection, the CMAR Firm will need to provide bid bond for Phase II (Construction Phase).

QUESTION 2: What is the contaminated soil to be disposed for the Will Ruth Pond site?

ANSWER 2: Refer to the Attachment 3.

III. Clarifications:

CLARIFICATION 1: Proposer's attention is directed to the following date changes, noted in red:

Schedule Milestone Activity	RFP Published Date	Revised Date
Issue the Request for Proposal	11/10/2022	N/A
Non-Mandatory Pre-Proposal Meeting	11/30/2022	N/A
Deadline for Questions	12/2/2022	12/9/2022
EPW Publishes Clarifications	12/9/2022	12/16/2022
Deadline for Submission of Proposals	1/4/2023 @ 3:00 PM	1/18/2023 @ 3:00 PM
Optional Interviews	1/12/2023	1/25/2023
CMAR Firms Notified of Rankings	1/13/2023	1/27/2023
PSB Board Consideration for Approval	3/8/2023	3/8/2023
Notice to Proceed	April 2023	April 2023
Preconstruction Phase Start	April 2023	April 2023
Early Work Package Start	April 2023	April 2023
Construction Notice to Proceed	April 2023	April 2023
Construction Final Completion	Summer 2025	Summer 2025

CLARIFICATION 2: El Paso Water stated that all communication shall be submitted directly to Purchasing at msolis@epwater.org or purchasing.info@epwater.org.

CLARIFICATION 3: The proposal page limit is 35 sheets. The Transmittal Letter sheets are excluded from this page limit. Refer to the table below for page distribution:

PROPOSAL SECTION	PAGE LIMIT
Transmittal Letter	2
Part 1: Executive Summary	2
Part 2: CMAR Firm Profile	3
Part 3: Project Team	3
Part 4: Relevant Experience	6
Part 5: Project Approach	18
Part 6: CMAR Contract Markup	1
Part 7: Cost Proposal	2
Total Sheets =	35

CLARIFICATION 4: Proposer's attention is directed to Section 6, Part 4 – Relevant Project Experience, paragraph under “Reference Projects”. No changes will be made to the RFP requirement of at least one (1) project experience utilizing the CMAR delivery model. This RFP section remains as published.

CLARIFICATION 5: Proposer's attention is directed to Section 7.1 – Minimum Qualification Requirements. Refer to the fifth bullet. No changes will be made to the RFP experience requirement of at least two (2) projects involving earthwork of comparable scale and complexity in the United States using Design-Bid-Build, CM At-Risk, Competitive Sealed Proposal or Design-Build project delivery methods. This RFP section remains as published.

END OF ADDENDUM 1

ATTACHMENT 1: MEETING AGENDA



Construction Manager-at-Risk (CMAR) Contractor Services for Will Ruth Pond and Conveyance, Palisades Stormwater System, and Trailhead Improvements Project
RFP SW 03-23

Pre-Proposal Meeting

November 30, 2022

10:00 AM

El Paso Water

1154 Hawkins Drive, Paso, TX 79925

3rd floor; rooms 1 and 2

Agenda

- I Introductions
- II Proposal Questions, Cone of Silence, Interpretations, and Addenda
- III Instructions to Offerors
- IV Project Requirements
- V General Questions/Comments



I. Introductions [By EPWater PM]

Owner:

El Paso Water (EPWater)
1154 Hawkins Blvd.
El Paso, Texas 79925

Alberto Hernandez, PE – Utility Engineering Division Manager
Jorge Chavez, EIT – Project Manager

Gisela R. Dagnino, P.E. – Chief Operations Officer - Stormwater
Ivan Hernandez, P.E. – Utility Engineering Division Manager
Amy Castner, P.E. – Utility Engineering Division Manager
Rose Guevara – Utilities Purchasing & Contracts Manager
Claudia Lara – Contracts Development Coordinator
Mirtha Solis – Senior Purchasing Agent
Veronica Garcia – Senior Project Compliance Specialist
Yadira Reyes – Project Compliance Specialist
Robert Davidson – Contract Construction Administrator
Cassie Flores – Utility Public Affairs Coordinator

TWDB:

Jeff Taylor - PM

Owners Advisor:

Atzuko Reveles, PE – Program Manager
Arcadis US, Inc.
401 E. Main Street, Suite 400
El Paso, Texas 79901

Engineers of Record:

Huitt-Zollars Inc.
Floyd Johnson, PE
5822 Cromo Dr, Ste 210
El Paso, Texas 79912

Moreno Cardenas Inc.
Mark Medina, PE
2505 E. Missouri Ave Ste 100
El Paso, TX 79903



II. Proposal Questions, Cone of Silence, and Addenda [By EPWater PM]

a. **Cone of Silence** - in effect.

b. **Communication**

All questions regarding the meaning or intent of the Contract Documents for this project, other than those asked here today, must be submitted to Owner in writing to:

Attention: RFP No. SW 03-23
Questions or Clarifications
Mirtha Solis
Senior Purchasing Agent

1154 Hawkins Blvd.
El Paso, TX 79925

OR emailed to:

msolis@epwater.org or purchasing.info@epwater.org

*****Refer to Addendum 1 for revisions****

Please include the RFP No. SW 03-23 in the subject line of the e-mail. Pursuant to the Cone of Silence, any communication between potential Offerors and EPWater staff or Engineer relating to this project is prohibited.

Interpretations or clarifications considered necessary by the Engineers in response to such questions will be issued by Addenda and made available to all via posting on EPWater website.



III. Instructions to Offerors [By EPWater Purchasing]

a. General Purchasing Requirements

- Payment and Performance Bond - \$45M
- Insurance Minimum Requirements – Refer to RFP Section 6
- Safety Record – Minimum EMR of 1.0

b. Addenda

All Addenda will be posted on the EPWater website in the individual bid's page:

https://epwater.org/business_center/purchasing_overview/bids/construction

- It is the Bidder's responsibility to visit the EPWater website frequently to become aware of all pertinent information made available to all Offerors.
- Bidder must acknowledge receipt of all addenda in proposal.



III. Instructions to Offerors (continued)

c. Proposal Delivery – Two Envelopes

**** Do not turn proposals in to security guard****

i. Envelope #1 – Technical Proposal:

“Proposal Response to RFP/CMAR SW 03-23 Enclosed”

CMAR for the Will Ruth Pond & Palisades
Attention: Mirtha Solis, Senior Purchasing Agent
El Paso Water - Public Service Board
1154 Hawkins Boulevard El Paso, Texas 79925

****Save to flash drive****

i. Envelope #2 – Phase I Fee Proposal:

“Fee Proposal for RFP/CMAR SW-03-23 Enclosed”

CMAR for CMAR for the Will Ruth Pond & Palisades
Attention: Mirtha Solis, Senior Purchasing Agent
El Paso Water - Public Service Board
1154 Hawkins Boulevard El Paso, Texas 79925

****Do not save to flash drive****



III. Instructions to Offerors (continued)

- d. **Proposal Due Date:**
 - ii. 1/04/2023 @ 3:00 PM
- e. **Fee Proposal Opening:**
 - ii. 1/04/2023 @ 3:15 PM

Virtually

<https://meet.goto.com/243980445>

Once found, click on “Proposal Opening Meeting link” to join. Additionally, you can join the proposal opening meeting by dialing in using your phone and entering the access code when prompted:

United States (Toll Free): +1 (866) 899-4679

United States: +1 (571) 317-3116

Access Code: 243-980-445



IV. Project Requirements [Owner's Advisor]

a. Procurement Model

- CMAR delivery model
- One-step RFP
- Two (2) Phases: Phase I (Pre-Construction) and Phase II (Construction Phase)
- Early Work Packages

ii. Delivery Format:

- 8 hard copies
- 1 electronic (PDF)

iii. Paper Size/Font

- Paper Size: 8.5 by 11 inches
- Font: 11-point or larger

iv. Page Limit

- 35

v. Limit 11"x17":

- 3 sheets

ii. Acceptance:

- Proposals will need to be Date and Time stamped by Purchasing or Contracts Administration for acceptance. If bids are mailed, please ensure to have the bid information above on the envelope to also show on the outside of the packaging.

*****Refer to Addendum 1 for revisions****

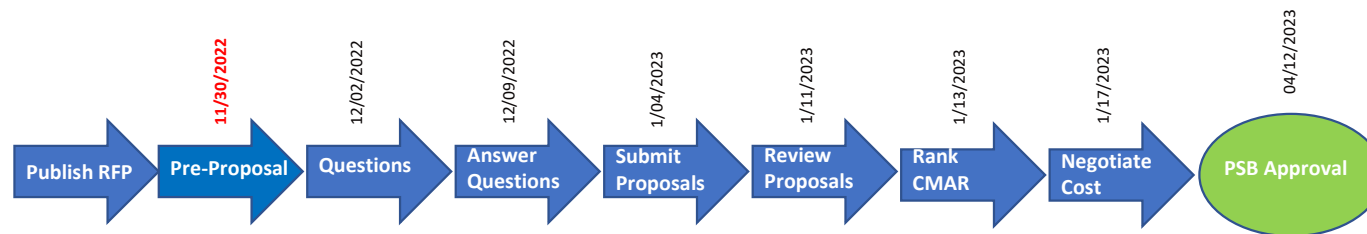
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Part 7: Cost Proposal	2



IV. Project Requirements [Owner's Advisor]

b. Procurement Process and Schedule

*****Refer to Addendum 1 for revisions****



IV. Project Requirements [Owner's Advisor]

*****Refer to Addendum 1 for revisions****

Schedule Milestone Activity	Date
Issue the Request for Proposal	11/10/2022
Nonmandatory pre-proposal meeting and site visit	11/30/2022 at 10 AM
Deadline for questions	12/02/2022
EPW publishes clarifications	12/09/2022
Deadline for submission of proposals	1/04/2023 at 3 PM
Optional interviews	1/12/2023
CMAR firms notified of rankings	1/13/2023
PSB Board considerations for approval	03/08/2023
Notice to Proceed	May 2023
Preconstruction Phase Start	May 2023
Early Work Packages	May 2023
Construction Notice to Proceed	May 2023
Construction Final Completion	Summer 2025

IV. Project Requirements [Owner's Advisor]

c. Project Description

Will Ruth Pond Improvements



Palisades Dam Improvements



IV. Project Requirements (continued)

d. Scope of Services

PROJECT PHASE	SCOPE OF SERVICES
Pre-Construction	
	Project Management
	Site Investigations
	GMP Preparation and Negotiation
Construction	
	Project Management
	Construction
	Substantial/Final Walkthrough
	Payment Application Review
	Closeout

IV. Project Requirements (continued)

e. Evaluation Criteria: Minimum Requirements

MINIMUM QUALIFICATION REQUIREMENTS	SCORING BASIS
Proposer's financial condition considering: <ul style="list-style-type: none"> • Current Bonding capacity and current available capacity • Insurability • Tangible net worth/capitalization • Material adverse conditions 	Pass/Fail
Prior 10 years earthwork (25,000 cy) project experience	Pass/Fail
Prior 10 years excavation of rock conditions project experience	Pass/Fail
Prior 10 years working in TxDOT right of way project experience	Pass/Fail
Prior 10 years large stormwater conduits project experience	Pass/Fail
Prior 10 years working in flood areas during monsoon project experience	Pass/Fail
Last 5 years EMR rating	Pass/Fail
Legal/Litigation history for the last 10 years	Pass/Fail
Licensing and Registration (as required) in the State of Texas	Pass/Fail

EVALUATION CRITERIA	SCORE WEIGH
CMAR Firm Profile	15%
Project Team	25%
Relevant Project Experience	20%
Project Approach	30%
Cost Proposal (Phase I)	10%
Total =	100%



IV. Project Requirements (continued)

f. Interviews

- Optional

g. Condition to Proposers

EL PASO WATER UTILITIES – PUBLIC SERVICE BOARD, a component of the City of El Paso, whose Board of Trustees is vested with management and control of the City of El Paso water and wastewater system is a public entity in the State of Texas created under Texas Government Code Chapter 10. The procurement process for this Project is authorized under Subchapter F, Section 2269.251.

The following firms and individuals are serving in an advisory capacity to the Owner for this Project and are therefore not eligible to assist or participate with any Proposer that submits a Proposal for the Project.

- Arcadis, U.S. Inc.
- Huitt-Zollars Inc.
- Moreno Cardenas Inc.

h. Obligation to Keep Project Team Intact

Project Manager
Preconstruction Manager
Quality Manager

Construction Manager
Lead Estimator
Scheduler

Site Safety Officer
General Superintendent



IV. Project Requirements (continued)

i. RFP Attachments

Attachment A: Definition of Terms
Attachment B: Scope of Services
Attachment C: Drawings
Attachment D: Affirmation of Compliance
Attachment E: Cost of Proposal
Attachment F: Template Forms
Attachment G: Contract Templates



V. General Questions/Comments

Site Tour





MEETING ATTENDANCE
SIGN-IN LIST

PROJECT/SUBJECT:

Pre-proposal Meeting RFP SW03-23 Will Ruth and Palisades

DATE: November 30, 2022
FIRST & LAST NAME

TIME: 10:00am-11:00am

SIGNATURE

EMAIL

PHONE

Rudy Rios

rrios@jordanfosterconstruction.com

915.588.6731

Alex Pimentel

apimentel@jordanfosterconstruction.com

915.345.6988

Estela Perez

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915.594.5647

Alex Soto

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915.330.2549

Ricardo Rivera

rrivera@epwater.org

915.594.4011

Floyd Johnson

fjohnson@hwhitt-zollwies.com

915.587.4339

Luis Valdez

lvaldez@hwhitt-zollwies.com

"



MEETING ATTENDANCE
SIGN-IN LIST

PROJECT/SUBJECT: Lunch Presentation: Wey Valve - True Zero Leakage Isolation Knife Gate Valves

DATE: December 10, 2019 TIME: 12:00pm-1:00pm

FIRST & LAST NAME	SIGNATURE	EMAIL	COMPANY	EPWATER SECTION	PHONE
Clinton Swearingen		Clinton.Swearingen@Arcadis.com			(915) 861-1141
Albert Hernandez		ahernandez@epwater.org	EPWater	220	(915) 540-2071
Atzuko Berube		atzuko.berube@epwater.org	Arcadis		(915) 747-3406
Sergio Delgado		Sergio.delgado@arcadis.com	Arcadis		915 490-4692
Rylan Edgmon		rylan@smithco.cc	Smithco		575-740-3492
Brian Lopez		brian.lopez@epwater.org	EPW	220	915 511-0632
Jesus Placencia		Jesus.Placencia@arcadis.com	Arcadis		
Joe Guilty		j.guilty@meridianconsulting.com	Meridian		915-525-9189
Vene Guajardo		bidding@southlandholdings.com	ORC		817-491-2703
YADIRA REYES		yreyes@epwater.org	EPW	750	915-594-5686
Cassie Flores		calflores@epwater.org	EPW		
Nilsa Leon		nilsa.leon@epwater.org	EPW	750	
Vernica Garcia		V.garcia@epwater.org	EPW	750	

**eurofins****Environment Testing
America**

ANALYTICAL REPORT

Eurofins El Paso
200 East Sunset Rd.
Suite E
El Paso, TX 79922
Tel: (915)585-3443

Laboratory Job ID: 830-2115-1

Client Project/Site: Will Ruth Excavation EPW-21-13

For:

ESSCO Environmental, Inc.
1000 Newman St.
El Paso, Texas 79902

Attn: Emile G Couroux

Authorized for release by:

7/19/2022 3:01:43 PM

Chad Bechtold, Project Manager
(813)690-3563

Chad.Bechtold@et.eurofinsus.com

Designee for

Holly Taylor, Project Manager
(806)794-1296

Holly.Taylor@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	9
QC Association Summary	15
Lab Chronicle	18
Certification Summary	19
Method Summary	20
Sample Summary	21
Chain of Custody	22
Receipt Checklists	24



Definitions/Glossary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Job ID: 830-2115-1

Laboratory: Eurofins El Paso

Narrative

Job Narrative 830-2115-1

Receipt

The sample was received on 7/12/2022 2:15 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

GC/MS VOA

Method 8260D: The matrix spike (MS) recoveries for preparation batch 860-60989 and analytical batch 860-60896 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260D: The following samples were diluted due to being fine carbon powder: South Stock Pile (830-2115-1) and (830-2115-A-1-A MS). Elevated reporting limits (RL) are provided. Sample was prepped with methanol from a bulk jar.

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

GC Semi VOA

Method TX_1005: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: South Stock Pile (830-2115-1). The reporting limits (RLs) have been adjusted proportionately.

Method TX_1005: The following sample was diluted due to dark color and odor: South Stock Pile (830-2115-1). Elevated reporting limits (RL) are provided.

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

Metals

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

Client Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Client Sample ID: South Stock Pile

Lab Sample ID: 830-2115-1

Date Collected: 07/12/22 10:00

Matrix: Solid

Date Received: 07/12/22 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0107	U	0.0500	0.0107	mg/L			07/15/22 10:59	50
Carbon tetrachloride	<0.0211	U	0.250	0.0211	mg/L			07/15/22 10:59	50
Chlorobenzene	<0.00795	U	0.0500	0.00795	mg/L			07/15/22 10:59	50
Chloroform	<0.0129	U	0.0500	0.0129	mg/L			07/15/22 10:59	50
1,2-Dichloroethane	<0.0143	U	0.0500	0.0143	mg/L			07/15/22 10:59	50
1,1-Dichloroethene	<0.0108	U	0.0500	0.0108	mg/L			07/15/22 10:59	50
2-Butanone	<0.135	U	2.50	0.135	mg/L			07/15/22 10:59	50
Tetrachloroethene	<0.0250	U	0.0500	0.0250	mg/L			07/15/22 10:59	50
Trichloroethene	<0.0212	U	0.250	0.0212	mg/L			07/15/22 10:59	50
Vinyl chloride	<0.0117	U	0.100	0.0117	mg/L			07/15/22 10:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		63 - 144		07/15/22 10:59	50
4-Bromofluorobenzene (Surr)	102		74 - 124		07/15/22 10:59	50
Dibromofluoromethane (Surr)	110		75 - 131		07/15/22 10:59	50
Toluene-d8 (Surr)	104		80 - 117		07/15/22 10:59	50

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0357	J	0.0504	0.0104	mg/Kg		07/14/22 14:53	07/14/22 17:43	25
Toluene	0.0536	J F1	0.252	0.0504	mg/Kg		07/14/22 14:53	07/14/22 17:43	25
Ethylbenzene	0.154		0.0504	0.0169	mg/Kg		07/14/22 14:53	07/14/22 17:43	25
m,p-Xylenes	<0.0403	U F1	0.101	0.0403	mg/Kg		07/14/22 14:53	07/14/22 17:43	25
o-Xylene	<0.0496	U F1	0.0504	0.0496	mg/Kg		07/14/22 14:53	07/14/22 17:43	25
Xylenes, Total	<0.0496	U	0.101	0.0496	mg/Kg		07/14/22 14:53	07/14/22 17:43	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		56 - 150	07/14/22 14:53	07/14/22 17:43	25
4-Bromofluorobenzene (Surr)	105		68 - 152	07/14/22 14:53	07/14/22 17:43	25
Dibromofluoromethane (Surr)	99		53 - 142	07/14/22 14:53	07/14/22 17:43	25
Toluene-d8 (Surr)	108		70 - 130	07/14/22 14:53	07/14/22 17:43	25

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.243		0.101	0.0403	mg/Kg			07/15/22 16:00	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH 1005	30900		870	367	mg/Kg			07/14/22 14:54	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	634	J	870	367	mg/Kg		07/14/22 15:31	07/15/22 12:41	2
>C12-C28	26700		870	367	mg/Kg		07/14/22 15:31	07/15/22 12:41	2
>C28-C35	3570		870	367	mg/Kg		07/14/22 15:31	07/15/22 12:41	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130	07/14/22 15:31	07/15/22 12:41	2
o-Terphenyl (Surr)	84		70 - 130	07/14/22 15:31	07/15/22 12:41	2

Eurofins El Paso

Client Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Client Sample ID: South Stock Pile

Lab Sample ID: 830-2115-1

Date Collected: 07/12/22 10:00

Matrix: Solid

Date Received: 07/12/22 14:15

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0954		0.0500	0.0184	mg/L		07/18/22 08:45	07/19/22 01:14	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.8		3.77	0.582	mg/Kg		07/15/22 08:44	07/15/22 16:22	10
Barium	38.8		3.77	0.327	mg/Kg		07/15/22 08:44	07/15/22 16:22	10
Cadmium	0.791	J	1.89	0.109	mg/Kg		07/15/22 08:44	07/15/22 16:22	10
Chromium	243		3.77	0.256	mg/Kg		07/15/22 08:44	07/15/22 16:22	10
Lead	842		1.89	0.183	mg/Kg		07/15/22 08:44	07/15/22 16:22	10
Selenium	1.43	J	1.89	0.468	mg/Kg		07/15/22 08:44	07/15/22 16:22	10
Silver	0.168	J	1.89	0.150	mg/Kg		07/15/22 08:44	07/15/22 16:22	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.910		0.0877	0.0169	mg/Kg		07/15/22 08:04	07/15/22 17:01	5

Surrogate Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (63-144)	BFB (74-124)	DBFM (75-131)	TOL (80-117)
LCS 860-61047/3	Lab Control Sample	108	105	105	102
LCSD 860-61047/4	Lab Control Sample Dup	103	103	107	99
MB 860-61047/10	Method Blank	106	103	101	103
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (63-144)	BFB (74-124)	DBFM (75-131)	TOL (80-117)
830-2115-1	South Stock Pile	115	102	110	104
LB 860-61011/1-A	Method Blank	107	103	106	104
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (56-150)	BFB (68-152)	DBFM (53-142)	TOL (70-130)
830-2115-1	South Stock Pile	108	105	99	108
830-2115-1 MS	South Stock Pile	103	104	97	109
LCS 860-60896/5	Lab Control Sample	104	100	102	109
LCSD 860-60896/6	Lab Control Sample Dup	107	100	102	109
MB 860-60896/10	Method Blank	106	98	98	104
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO (70-130)	OTPH (70-130)
830-2115-1 - RA	South Stock Pile	107	84
LCS 860-60960/2-A	Lab Control Sample	120	91
LCSD 860-60960/3-A	Lab Control Sample Dup	126	99

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Surrogate Summary

Client: ESSCO Environmental, Inc.

Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO (70-130)	OTPH (70-130)
MB 860-60960/1-A	Method Blank	97	95
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-61047/10

Matrix: Solid

Analysis Batch: 61047

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214	mg/L			07/15/22 09:43	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L			07/15/22 09:43	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L			07/15/22 09:43	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L			07/15/22 09:43	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L			07/15/22 09:43	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L			07/15/22 09:43	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L			07/15/22 09:43	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L			07/15/22 09:43	1
Trichloroethene	<0.000424	U	0.00500	0.000424	mg/L			07/15/22 09:43	1
Vinyl chloride	<0.000234	U	0.00200	0.000234	mg/L			07/15/22 09:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		07/15/22 09:43	1
4-Bromofluorobenzene (Surr)	103		74 - 124		07/15/22 09:43	1
Dibromofluoromethane (Surr)	101		75 - 131		07/15/22 09:43	1
Toluene-d8 (Surr)	103		80 - 117		07/15/22 09:43	1

Lab Sample ID: LCS 860-61047/3

Matrix: Solid

Analysis Batch: 61047

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04741		mg/L		95	66 - 142
Carbon tetrachloride	0.0500	0.05304		mg/L		106	62 - 125
Chlorobenzene	0.0500	0.04744		mg/L		95	60 - 133
Chloroform	0.0500	0.04986		mg/L		100	70 - 130
1,2-Dichloroethane	0.0500	0.05183		mg/L		104	68 - 127
1,1-Dichloroethene	0.0500	0.04918		mg/L		98	59 - 172
2-Butanone	0.250	0.2550		mg/L		102	60 - 140
Tetrachloroethene	0.0500	0.04877		mg/L		98	71 - 125
Trichloroethene	0.0500	0.04845		mg/L		97	62 - 137
Vinyl chloride	0.0500	0.04519		mg/L		90	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		63 - 144
4-Bromofluorobenzene (Surr)	105		74 - 124
Dibromofluoromethane (Surr)	105		75 - 131
Toluene-d8 (Surr)	102		80 - 117

Lab Sample ID: LCSD 860-61047/4

Matrix: Solid

Analysis Batch: 61047

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04516		mg/L		90	66 - 142	5	25
Carbon tetrachloride	0.0500	0.04900		mg/L		98	62 - 125	8	25
Chlorobenzene	0.0500	0.04477		mg/L		90	60 - 133	6	25
Chloroform	0.0500	0.04758		mg/L		95	70 - 130	5	25

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QC Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

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

Lab Sample ID: LCSD 860-61047/4

Matrix: Solid

Analysis Batch: 61047

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloroethane	0.0500	0.04947		mg/L		99	68 - 127	5	25
1,1-Dichloroethene	0.0500	0.04158		mg/L		83	59 - 172	17	25
2-Butanone	0.250	0.2541		mg/L		102	60 - 140	0	25
Tetrachloroethene	0.0500	0.04622		mg/L		92	71 - 125	5	25
Trichloroethene	0.0500	0.04603		mg/L		92	62 - 137	5	25
Vinyl chloride	0.0500	0.04297		mg/L		86	60 - 140	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	103		63 - 144
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	107		75 - 131
Toluene-d8 (Surr)	99		80 - 117

Lab Sample ID: LB 860-61011/1-A

Matrix: Solid

Analysis Batch: 61047

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214	mg/L			07/15/22 10:02	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L			07/15/22 10:02	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L			07/15/22 10:02	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L			07/15/22 10:02	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L			07/15/22 10:02	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L			07/15/22 10:02	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L			07/15/22 10:02	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L			07/15/22 10:02	1
Trichloroethene	<0.000424	U	0.00500	0.000424	mg/L			07/15/22 10:02	1
Vinyl chloride	<0.000234	U	0.00200	0.000234	mg/L			07/15/22 10:02	1

Surrogate	LB %Recovery	LB Qualifier	LB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		63 - 144		07/15/22 10:02	1
4-Bromofluorobenzene (Surr)	103		74 - 124		07/15/22 10:02	1
Dibromofluoromethane (Surr)	106		75 - 131		07/15/22 10:02	1
Toluene-d8 (Surr)	104		80 - 117		07/15/22 10:02	1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-60896/10

Matrix: Solid

Analysis Batch: 60896

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000207	U	0.00100	0.000207	mg/Kg			07/14/22 15:05	1
Toluene	<0.00100	U	0.00500	0.00100	mg/Kg			07/14/22 15:05	1
Ethylbenzene	<0.000336	U	0.00100	0.000336	mg/Kg			07/14/22 15:05	1
m,p-Xylenes	<0.000800	U	0.00200	0.000800	mg/Kg			07/14/22 15:05	1
o-Xylene	<0.000985	U	0.00100	0.000985	mg/Kg			07/14/22 15:05	1
Xylenes, Total	<0.000985	U	0.00200	0.000985	mg/Kg			07/14/22 15:05	1

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QC Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-60896/10

Matrix: Solid

Analysis Batch: 60896

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150		07/14/22 15:05	1
4-Bromofluorobenzene (Surr)	98		68 - 152		07/14/22 15:05	1
Dibromofluoromethane (Surr)	98		53 - 142		07/14/22 15:05	1
Toluene-d8 (Surr)	104		70 - 130		07/14/22 15:05	1

Lab Sample ID: LCS 860-60896/5

Matrix: Solid

Analysis Batch: 60896

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04745		mg/Kg		95	66 - 142
Toluene	0.0500	0.05200		mg/Kg		104	74 - 130
Ethylbenzene	0.0500	0.05096		mg/Kg		102	80 - 130
m,p-Xylenes	0.0500	0.05001		mg/Kg		100	78 - 130
o-Xylene	0.0500	0.05129		mg/Kg		103	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	102		53 - 142
Toluene-d8 (Surr)	109		70 - 130

Lab Sample ID: LCSD 860-60896/6

Matrix: Solid

Analysis Batch: 60896

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04601		mg/Kg		92	66 - 142	3	25
Toluene	0.0500	0.05057		mg/Kg		101	74 - 130	3	25
Ethylbenzene	0.0500	0.04947		mg/Kg		99	80 - 130	3	25
m,p-Xylenes	0.0500	0.04834		mg/Kg		97	78 - 130	3	25
o-Xylene	0.0500	0.05042		mg/Kg		101	79 - 130	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	102		53 - 142
Toluene-d8 (Surr)	109		70 - 130

Lab Sample ID: 830-2115-1 MS

Matrix: Solid

Analysis Batch: 60896

Client Sample ID: South Stock Pile

Prep Type: Total/NA

Prep Batch: 60989

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0357	J	2.52	2.913		mg/Kg		114	71 - 119
Toluene	0.0536	J F1	2.52	3.273	F1	mg/Kg		128	74 - 122
Ethylbenzene	0.154		2.52	3.227		mg/Kg		122	80 - 123
m,p-Xylenes	<0.0403	U F1	2.52	3.261	F1	mg/Kg		129	78 - 127

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QC Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 830-2115-1 MS

Matrix: Solid

Analysis Batch: 60896

Client Sample ID: South Stock Pile

Prep Type: Total/NA

Prep Batch: 60989

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.0496	U F1	2.52	3.180	F1	mg/Kg		126	79 - 125
Surrogate									
	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	103		56 - 150						
4-Bromofluorobenzene (Surr)	104		68 - 152						
Dibromofluoromethane (Surr)	97		53 - 142						
Toluene-d8 (Surr)	109		70 - 130						

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 860-60960/1-A

Matrix: Solid

Analysis Batch: 60907

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 60960

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<21.1	U	50.0	21.1	mg/Kg		07/14/22 13:08	07/14/22 14:16	1
>C12-C28	<21.1	U	50.0	21.1	mg/Kg		07/14/22 13:08	07/14/22 14:16	1
>C28-C35	<21.1	U	50.0	21.1	mg/Kg		07/14/22 13:08	07/14/22 14:16	1
Surrogate									
	%Recovery	Qualifier	Limits						
1-Chlorooctane (Surr)	97		70 - 130						
o-Terphenyl (Surr)	95		70 - 130						

Lab Sample ID: LCS 860-60960/2-A

Matrix: Solid

Analysis Batch: 60907

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 60960

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C6-C12	998	1098		mg/Kg		110	75 - 125
>C12-C28	1000	1193		mg/Kg		119	75 - 125
Surrogate							
	%Recovery	Qualifier	Limits				
1-Chlorooctane (Surr)	120		70 - 130				
o-Terphenyl (Surr)	91		70 - 130				

Lab Sample ID: LCSD 860-60960/3-A

Matrix: Solid

Analysis Batch: 60907

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 60960

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C12	998	1115		mg/Kg		112	75 - 125	2	20
>C12-C28	1000	1223		mg/Kg		122	75 - 125	3	20
Surrogate									
	%Recovery	Qualifier	Limits						
1-Chlorooctane (Surr)	126		70 - 130						
o-Terphenyl (Surr)	99		70 - 130						

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QC Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-61326/1-A

Matrix: Solid

Analysis Batch: 61549

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61326

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00368	U	0.0100	0.00368	mg/L		07/18/22 08:45	07/19/22 00:31	1

Lab Sample ID: LCS 860-61326/2-A

Matrix: Solid

Analysis Batch: 61549

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 61326

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1.00	0.9889		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-61326/3-A

Matrix: Solid

Analysis Batch: 61549

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 61326

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1.00	0.9888		mg/L		99	80 - 120	0	20

Lab Sample ID: LB 860-61247/1-B

Matrix: Solid

Analysis Batch: 61549

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 61326

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0184	U	0.0500	0.0184	mg/L		07/18/22 08:45	07/19/22 01:10	1

Lab Sample ID: LB 860-61252/1-B

Matrix: Solid

Analysis Batch: 61549

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 61326

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00368	U	0.0100	0.00368	mg/L		07/18/22 08:45	07/19/22 00:41	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 860-61066/1-A

Matrix: Solid

Analysis Batch: 61228

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 61066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0593	U	0.385	0.0593	mg/Kg		07/15/22 08:44	07/15/22 15:07	1
Barium	<0.0334	U	0.385	0.0334	mg/Kg		07/15/22 08:44	07/15/22 15:07	1
Cadmium	<0.0112	U	0.192	0.0112	mg/Kg		07/15/22 08:44	07/15/22 15:07	1
Chromium	<0.0261	U	0.385	0.0261	mg/Kg		07/15/22 08:44	07/15/22 15:07	1
Lead	<0.0186	U	0.192	0.0186	mg/Kg		07/15/22 08:44	07/15/22 15:07	1
Selenium	<0.0477	U	0.192	0.0477	mg/Kg		07/15/22 08:44	07/15/22 15:07	1
Silver	<0.0153	U	0.192	0.0153	mg/Kg		07/15/22 08:44	07/15/22 15:07	1

QC Sample Results

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 860-61066/2-A
Matrix: Solid
Analysis Batch: 61228

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	10.0	9.771		mg/Kg		98	80 - 120
Barium	10.0	9.896		mg/Kg		99	80 - 120
Cadmium	10.0	9.915		mg/Kg		99	80 - 120
Chromium	10.0	9.965		mg/Kg		100	80 - 120
Lead	10.0	9.751		mg/Kg		98	80 - 120
Selenium	10.0	9.683		mg/Kg		97	80 - 120
Silver	5.00	4.878		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 860-61066/3-A
Matrix: Solid
Analysis Batch: 61228

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61066

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	10.0	9.511		mg/Kg		95	80 - 120	3	20
Barium	10.0	9.687		mg/Kg		97	80 - 120	2	20
Cadmium	10.0	9.477		mg/Kg		95	80 - 120	5	20
Chromium	10.0	9.589		mg/Kg		96	80 - 120	4	20
Lead	10.0	9.561		mg/Kg		96	80 - 120	2	20
Selenium	10.0	9.338		mg/Kg		93	80 - 120	4	20
Silver	5.00	4.698		mg/Kg		94	80 - 120	4	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 860-61005/10-A
Matrix: Solid
Analysis Batch: 61236

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00326	U	0.0169	0.00326	mg/Kg		07/14/22 15:57	07/15/22 15:22	1

Lab Sample ID: LCS 860-61005/11-A
Matrix: Solid
Analysis Batch: 61236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.192	0.2083		mg/Kg		108	80 - 120

Lab Sample ID: LCSD 860-61005/12-A
Matrix: Solid
Analysis Batch: 61236

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61005

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	0.2022		mg/Kg		101	80 - 120	3	20

QC Association Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

GC/MS VOA

Analysis Batch: 60896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	8260D	60989
MB 860-60896/10	Method Blank	Total/NA	Solid	8260D	
LCS 860-60896/5	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 860-60896/6	Lab Control Sample Dup	Total/NA	Solid	8260D	
830-2115-1 MS	South Stock Pile	Total/NA	Solid	8260D	60989

Prep Batch: 60989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	5035	60989
830-2115-1 MS	South Stock Pile	Total/NA	Solid	5035	

Leach Batch: 61011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	TCLP	Solid	1311	61011
LB 860-61011/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 61047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	TCLP	Solid	8260C	61011
LB 860-61011/1-A	Method Blank	TCLP	Solid	8260C	
MB 860-61047/10	Method Blank	Total/NA	Solid	8260C	61011
LCS 860-61047/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-61047/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 61208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 60907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-60960/1-A	Method Blank	Total/NA	Solid	TX 1005	60960
LCS 860-60960/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	
LCSD 860-60960/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	

Prep Batch: 60960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1 - RA	South Stock Pile	Total/NA	Solid	TX_1005_S_Pre	60960
MB 860-60960/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
LCS 860-60960/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
LCSD 860-60960/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	

Analysis Batch: 60990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	TX 1005	

Eurofins El Paso

QC Association Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

GC Semi VOA

Analysis Batch: 61093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1 - RA	South Stock Pile	Total/NA	Solid	TX 1005	60960

Metals

Prep Batch: 61005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	7471A	
MB 860-61005/10-A	Method Blank	Total/NA	Solid	7471A	
LCS 860-61005/11-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 860-61005/12-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Prep Batch: 61066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	3051A	
MB 860-61066/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 860-61066/2-A	Lab Control Sample	Total/NA	Solid	3051A	
LCSD 860-61066/3-A	Lab Control Sample Dup	Total/NA	Solid	3051A	

Analysis Batch: 61228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	6020A	61066
MB 860-61066/1-A	Method Blank	Total/NA	Solid	6020A	61066
LCS 860-61066/2-A	Lab Control Sample	Total/NA	Solid	6020A	61066
LCSD 860-61066/3-A	Lab Control Sample Dup	Total/NA	Solid	6020A	61066

Analysis Batch: 61236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	Total/NA	Solid	7471A	61005
MB 860-61005/10-A	Method Blank	Total/NA	Solid	7471A	61005
LCS 860-61005/11-A	Lab Control Sample	Total/NA	Solid	7471A	61005
LCSD 860-61005/12-A	Lab Control Sample Dup	Total/NA	Solid	7471A	61005

Leach Batch: 61247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	TCLP	Solid	1311	
LB 860-61247/1-B	Method Blank	TCLP	Solid	1311	

Leach Batch: 61252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 860-61252/1-B	Method Blank	TCLP	Solid	1312	

Prep Batch: 61326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	TCLP	Solid	3010A	61247
LB 860-61247/1-B	Method Blank	TCLP	Solid	3010A	61247
LB 860-61252/1-B	Method Blank	TCLP	Solid	3010A	61252
MB 860-61326/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 860-61326/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 860-61326/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

QC Association Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Metals

Analysis Batch: 61549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2115-1	South Stock Pile	TCLP	Solid	6010C	61326
LB 860-61247/1-B	Method Blank	TCLP	Solid	6010C	61326
LB 860-61252/1-B	Method Blank	TCLP	Solid	6010C	61326
MB 860-61326/1-A	Method Blank	Total/NA	Solid	6010C	61326
LCS 860-61326/2-A	Lab Control Sample	Total/NA	Solid	6010C	61326
LCSD 860-61326/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	61326

Lab Chronicle

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Client Sample ID: South Stock Pile

Lab Sample ID: 830-2115-1

Date Collected: 07/12/22 10:00

Matrix: Solid

Date Received: 07/12/22 14:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			1.0 g	1.0 mL	61011	07/14/22 16:00	JRB	XEN STF
TCLP	Analysis	8260C		50	5 mL	5 mL	61047	07/15/22 10:59	NA	XEN STF
Total/NA	Prep	5035			4.96 g	10 mL	60989	07/14/22 14:53	MTMG	XEN STF
Total/NA	Analysis	8260D		25	5 mL	5 mL	60896	07/14/22 17:43	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			61208	07/15/22 16:00	KLV	XEN STF
Total/NA	Prep	TX_1005_S_Prep	RA		1.15 g	10 mL	60960	07/14/22 15:31	SYH	XEN STF
Total/NA	Analysis	TX 1005	RA	2			61093	07/15/22 12:41	DD	XEN STF
Total/NA	Analysis	TX 1005		1			60990	07/14/22 14:54	DD	XEN STF
TCLP	Leach	1311			1.0 g	1.0 mL	61247	07/15/22 15:00	EMC	XEN STF
TCLP	Prep	3010A			10 mL	50 mL	61326	07/18/22 08:45	MD	XEN STF
TCLP	Analysis	6010C		1			61549	07/19/22 01:14	DP	XEN STF
Total/NA	Prep	3051A			.53 g	50 mL	61066	07/15/22 08:44	PB	XEN STF
Total/NA	Analysis	6020A		10			61228	07/15/22 16:22	SHZ	XEN STF
Total/NA	Prep	7471A			.57 g	50 mL	61005	07/15/22 08:04	MCA	XEN STF
Total/NA	Analysis	7471A		5			61236	07/15/22 17:01	PB	XEN STF

Laboratory References:

XEN STF = Eurofins Houston, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-46	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Solid	Total BTEX

Method Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
8260D	Volatile Organic Compounds by GC/MS	SW846	XEN STF
Total BTEX	Total BTEX Calculation	TAL SOP	XEN STF
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XEN STF
6010C	Metals (ICP)	SW846	XEN STF
6020A	Metals (ICP/MS)	SW846	XEN STF
7471A	Mercury (CVAA)	SW846	XEN STF
1311	TCLP Extraction	SW846	XEN STF
3010A	Preparation, Total Metals	SW846	XEN STF
3051A	Preparation, Metals, Microwave Assisted	SW846	XEN STF
5030C	Purge and Trap	SW846	XEN STF
5035	Closed System Purge and Trap	SW846	XEN STF
7471A	Preparation, Mercury	SW846	XEN STF
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	XEN STF

Protocol References:

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

XEN STF = Eurofins Houston, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: ESSCO Environmental, Inc.
Project/Site: Will Ruth Excavation EPW-21-13

Job ID: 830-2115-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
830-2115-1	South Stock Pile	Solid	07/12/22 10:00	07/12/22 14:15

1

2

3

4

5

6

7

8

9

10

11

12

13

14



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CHAIN OF CUSTODY

Page 1 of 1

Phoenix, Arizona (480-355-0900)

Xenco Quote #

Xenco Job #

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

Field Comments

Loc: 830
2115

830-2115 Chain of Custody



Notes:

3 Day Emergency

<input type="checkbox"/> Same Day TAT	<input type="checkbox"/> 5 Day TAT	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> Level IV (Full Data Pkg /raw data)
<input type="checkbox"/> Next Day EMERGENCY	<input type="checkbox"/> 7 Day TAT	<input type="checkbox"/> Level III Std QC + Forms	<input type="checkbox"/> TRRP Level IV
<input type="checkbox"/> 2 Day EMERGENCY	<input type="checkbox"/> Contract TAT	<input type="checkbox"/> Level 3 (CLP Forms)	<input type="checkbox"/> UST / RG -411
<input checked="" type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist	

TAT Starts Day received by Lab, if received by 5:00 pm

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

FED-EX/UPS Tracking #

Relinquished by:

Date Time:

Received By:

Relinquished By:

Date Time:

Received By:

Relinquished by:

Date Time:

Received By:

Relinquished By:

Date Time:

Received By:

Relinquished by:

Date Time:

Received By:

Relinquished By:

Date Time:

Received By:

On Ice

Cooler Temp.

Therm Corr. Factor

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

Login Sample Receipt Checklist

Client: ESSCO Environmental, Inc.

Job Number: 830-2115-1

Login Number: 2115

List Source: Eurofins El Paso

List Number: 1

Creator: Aparicio, Niria

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

Login Sample Receipt Checklist

Client: ESSCO Environmental, Inc.

Job Number: 830-2115-1

Login Number: 2115

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 07/14/22 02:50 PM

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

Client Sample Result Summary

Client: ESSCO Environmental, Inc.

Job ID: 830-2115-1

Project/Site: Will Ruth Excavation EPW-21-13

Lab Sample ID: 830-2115-1

Client Sample ID: South Stock Pile

Matrix: Solid

Date Collected: 07/12/2022 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS - TCLP

Prepared:

Analyzed: 07/15/2022 10:59

Analyte	Unit/RL:	mg/L	RL	MDL
Benzene		<0.0107 U	0.0500	0.0107
Carbon tetrachloride		<0.0211 U	0.250	0.0211
Chlorobenzene		<0.00795 U	0.0500	0.00795
Chloroform		<0.0129 U	0.0500	0.0129
1,2-Dichloroethane		<0.0143 U	0.0500	0.0143
1,1-Dichloroethene		<0.0108 U	0.0500	0.0108
2-Butanone		<0.135 U	2.50	0.135
Tetrachloroethene		<0.0250 U	0.0500	0.0250
Trichloroethene		<0.0212 U	0.250	0.0212
Vinyl chloride		<0.0117 U	0.100	0.0117

Method: 8260D - Volatile Organic Compounds by GC/MS

Prepared: 07/14/2022 14:53

Analyzed: 07/14/2022 17:43

Analyte	Unit/RL:	mg/Kg	RL	MDL
Benzene		0.0357 J	0.0504	0.0104
Toluene		0.0536 J F1	0.252	0.0504
Ethylbenzene		0.154	0.0504	0.0169
m,p-Xylenes		<0.0403 U F1	0.101	0.0403
o-Xylene		<0.0496 U F1	0.0504	0.0496
Xylenes, Total		<0.0496 U	0.101	0.0496

Method: Total BTEX - Total BTEX Calculation

Prepared:

Analyzed: 07/15/2022 16:00

Analyte	Unit/RL:	mg/Kg	RL	MDL
Total BTEX		0.243	0.101	0.0403

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Prepared:

Analyzed: 07/14/2022 14:54

Analyte	Unit/RL:	mg/Kg	RL	MDL
Total TPH 1005		30900	870	367

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) - RA

Prepared: 07/14/2022 15:31

Analyzed: 07/15/2022 12:41

Analyte	Unit/RL:	mg/Kg	RL	MDL
C6-C12		634 J	870	367
>C12-C28		26700	870	367
>C28-C35		3570	870	367

Method: 6010C - Metals (ICP) - TCLP

Prepared: 07/18/2022 08:45

Analyzed: 07/19/2022 01:14

Analyte	Unit/RL:	mg/L	RL	MDL
Lead		0.0954	0.0500	0.0184

Method: 6020A - Metals (ICP/MS)

Client Sample Result Summary

Client: ESSCO Environmental, Inc.

Job ID: 830-2115-1

Project/Site: Will Ruth Excavation EPW-21-13

Lab Sample ID: 830-2115-1

Client Sample ID: South Stock Pile

Matrix: Solid

Date Collected: 07/12/2022 10:00

Method: 6020A - Metals (ICP/MS)

Prepared: 07/15/2022 08:44

Analyzed: 07/15/2022 16:22

Analyte	Unit/RL:	mg/Kg	RL	MDL
Arsenic		14.8	3.77	0.582
Barium		38.8	3.77	0.327
Cadmium		0.791 J	1.89	0.109
Chromium		243	3.77	0.256
Lead		842	1.89	0.183
Selenium		1.43 J	1.89	0.468
Silver		0.168 J	1.89	0.150

Method: 7471A - Mercury (CVAA)

Prepared: 07/15/2022 08:04

Analyzed: 07/15/2022 17:01

Analyte	Unit/RL:	mg/Kg	RL	MDL
Mercury		0.910	0.0877	0.0169

ANALYTICAL REPORT

Eurofins El Paso
200 East Sunset Rd.
Suite E
El Paso, TX 79922
Tel: (915)585-3443

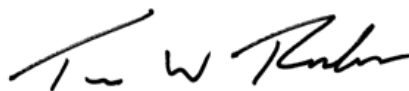
Laboratory Job ID: 830-2190-1

Client Project/Site: Will Ruth Project

For:

ACT Environmental Inc
967 Mabury Rd
San Jose, California 95133

Attn: Fernando Montes



Authorized for release by:

8/11/2022 11:02:55 PM

Travis Richter, Project Manager
(281)794-7216

Travis.Richter@et.eurofinsus.com

LINKS

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results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	10
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

Definitions/Glossary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Qualifiers

GC Semi VOA

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

Metals

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

Glossary

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

Case Narrative

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Job ID: 830-2190-1

Laboratory: Eurofins El Paso

Narrative

Job Narrative 830-2190-1

Comments

No additional comments.

Receipt

The sample was received on 8/4/2022 12:01 PM. Unless otherwise noted below, the sample arrived in good condition, and when required, properly preserved and on ice. The temperature of the cooler at receipt was 33.3° C.

Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria: The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and the chilling process has begun.

GC Semi VOA

Method TX 1005: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-64003 and analytical batch 860-63961 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method TX 1005: The following sample was diluted due to the nature of the sample matrix: soil (830-2190-1). Elevated reporting limits (RLs) are provided.

Method TX_1005_S_Prep: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: soil (830-2190-1). The reporting limits (RLs) have been adjusted proportionately.

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

Metals

Method 6020A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-63903 and analytical batch 860-64251 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) and post digestion spike (PDS) recovery were within acceptance limits.

Method 6020A: The following sample was diluted to bring the concentration of target analytes within the calibration range: soil (830-2190-1). Elevated reporting limits (RLs) are provided.

Method 7471A: The following sample was diluted to bring the concentration of target analytes within the calibration range: soil (830-2190-1). Elevated reporting limits (RLs) are provided.

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

General Chemistry

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

Client Sample Results

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Client Sample ID: soil

Lab Sample ID: 830-2190-1

Date Collected: 08/04/22 10:30

Matrix: Solid

Date Received: 08/04/22 12:01

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<980	U	980		mg/Kg		08/08/22 13:20	08/09/22 15:02	10
>C12-C28 Range Hydrocarbons	20100		980		mg/Kg		08/08/22 13:20	08/09/22 15:02	10
>C28-C35 Range Hydrocarbons	2850		980		mg/Kg		08/08/22 13:20	08/09/22 15:02	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	95		70 - 130				08/08/22 13:20	08/09/22 15:02	10
1-Chlorooctane (Surr)	88		70 - 130				08/08/22 13:20	08/09/22 15:02	10

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0500	U	0.0500		mg/L		08/09/22 10:00	08/09/22 19:17	1
Lead	0.117		0.0500		mg/L		08/09/22 10:00	08/09/22 19:17	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16.5		3.39		mg/Kg		08/09/22 13:08	08/09/22 18:17	10
Barium	62.7		3.39		mg/Kg		08/09/22 13:08	08/09/22 18:17	10
Cadmium	<1.69	U	1.69		mg/Kg		08/09/22 13:08	08/09/22 18:17	10
Chromium	266		3.39		mg/Kg		08/09/22 13:08	08/09/22 18:17	10
Lead	1070		42.4		mg/Kg		08/09/22 13:08	08/10/22 18:27	250
Selenium	<1.69	U	1.69		mg/Kg		08/09/22 13:08	08/09/22 18:17	10
Silver	<1.69	U	1.69		mg/Kg		08/09/22 13:08	08/09/22 18:17	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.12		0.0980		mg/Kg		08/09/22 05:46	08/09/22 14:36	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>180		1.00		Degrees F			08/09/22 14:28	1

Surrogate Summary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTPH	1CO
		(70-130)	(70-130)
830-2190-1 - RA2	soil	95	88
LCS 860-64003/2-A	Lab Control Sample	77	94
LCSD 860-64003/3-A	Lab Control Sample Dup	85	103
MB 860-64003/1-A	Method Blank	96	99

Surrogate Legend

OTPH = o-Terphenyl (Surr)

1CO = 1-Chlorooctane (Surr)

QC Sample Results

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 860-64003/1-A

Matrix: Solid

Analysis Batch: 63961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64003

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		08/08/22 13:20	08/08/22 19:02	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		08/08/22 13:20	08/08/22 19:02	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		08/08/22 13:20	08/08/22 19:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	96		70 - 130	08/08/22 13:20	08/08/22 19:02	1
1-Chlorooctane (Surr)	99		70 - 130	08/08/22 13:20	08/08/22 19:02	1

Lab Sample ID: LCS 860-64003/2-A

Matrix: Solid

Analysis Batch: 64139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C6-C12 Range Hydrocarbons	999	1090		mg/Kg		109	75 - 125
>C12-C28 Range Hydrocarbons	1000	1106		mg/Kg		111	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	77		70 - 130
1-Chlorooctane (Surr)	94		70 - 130

Lab Sample ID: LCSD 860-64003/3-A

Matrix: Solid

Analysis Batch: 64139

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64003

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C12 Range Hydrocarbons	999	1172		mg/Kg		117	75 - 125	7	20
>C12-C28 Range Hydrocarbons	1000	1185		mg/Kg		119	75 - 125	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	85		70 - 130
1-Chlorooctane (Surr)	103		70 - 130

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-64142/1-A

Matrix: Solid

Analysis Batch: 64366

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64142

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0100	U	0.0100		mg/L		08/09/22 10:00	08/09/22 18:12	1
Lead	<0.0100	U	0.0100		mg/L		08/09/22 10:00	08/09/22 18:12	1

Lab Sample ID: LCS 860-64142/2-A

Matrix: Solid

Analysis Batch: 64366

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.00	0.9582		mg/L		96	80 - 120

Eurofins El Paso

QC Sample Results

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 860-64142/2-A
Matrix: Solid
Analysis Batch: 64366

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	1.00	0.9680		mg/L		97	80 - 120
Cadmium	1.00	0.9660		mg/L		97	80 - 120
Chromium	1.00	1.007		mg/L		101	80 - 120
Lead	1.00	0.9772		mg/L		98	80 - 120
Selenium	1.00	0.9522		mg/L		95	80 - 120
Silver	0.500	0.4637		mg/L		93	80 - 120

Lab Sample ID: LCSD 860-64142/3-A
Matrix: Solid
Analysis Batch: 64366

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64142

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.00	0.9675		mg/L		97	80 - 120	1	20
Barium	1.00	0.9722		mg/L		97	80 - 120	0	20
Cadmium	1.00	0.9675		mg/L		97	80 - 120	0	20
Chromium	1.00	1.008		mg/L		101	80 - 120	0	20
Lead	1.00	0.9880		mg/L		99	80 - 120	1	20
Selenium	1.00	0.9523		mg/L		95	80 - 120	0	20
Silver	0.500	0.4650		mg/L		93	80 - 120	0	20

Lab Sample ID: LB 860-64079/1-C
Matrix: Solid
Analysis Batch: 64366

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 64142

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0500	U	0.0500		mg/L		08/09/22 10:00	08/09/22 18:22	1
Lead	<0.0500	U	0.0500		mg/L		08/09/22 10:00	08/09/22 18:22	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 860-63903/1-A
Matrix: Solid
Analysis Batch: 64251

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63903

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.385	U	0.385		mg/Kg		08/07/22 18:01	08/09/22 16:51	1
Barium	<0.385	U	0.385		mg/Kg		08/07/22 18:01	08/09/22 16:51	1
Cadmium	<0.192	U	0.192		mg/Kg		08/07/22 18:01	08/09/22 16:51	1
Chromium	<0.385	U	0.385		mg/Kg		08/07/22 18:01	08/09/22 16:51	1
Lead	<0.192	U	0.192		mg/Kg		08/07/22 18:01	08/09/22 16:51	1
Selenium	<0.192	U	0.192		mg/Kg		08/07/22 18:01	08/09/22 16:51	1
Silver	<0.192	U	0.192		mg/Kg		08/07/22 18:01	08/09/22 16:51	1

Lab Sample ID: LCS 860-63903/2-A
Matrix: Solid
Analysis Batch: 64251

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	9.80	9.830		mg/Kg		100	80 - 120
Barium	9.80	9.610		mg/Kg		98	80 - 120

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QC Sample Results

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 860-63903/2-A

Matrix: Solid

Analysis Batch: 64251

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	9.80	9.584		mg/Kg		98	80 - 120
Chromium	9.80	9.595		mg/Kg		98	80 - 120
Lead	9.80	9.368		mg/Kg		96	80 - 120
Selenium	9.80	9.807		mg/Kg		100	80 - 120
Silver	4.90	4.614		mg/Kg		94	80 - 120

Lab Sample ID: LCSD 860-63903/3-A

Matrix: Solid

Analysis Batch: 64251

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63903

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	9.80	9.948		mg/Kg		101	80 - 120	1	20
Barium	9.80	9.851		mg/Kg		100	80 - 120	2	20
Cadmium	9.80	9.821		mg/Kg		100	80 - 120	2	20
Chromium	9.80	9.895		mg/Kg		101	80 - 120	3	20
Lead	9.80	9.576		mg/Kg		98	80 - 120	2	20
Selenium	9.80	9.965		mg/Kg		102	80 - 120	2	20
Silver	4.90	4.748		mg/Kg		97	80 - 120	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 860-64086/10-A

Matrix: Solid

Analysis Batch: 64255

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0192	U	0.0192		mg/Kg		08/09/22 05:46	08/09/22 13:36	1

Lab Sample ID: LCS 860-64086/11-A

Matrix: Solid

Analysis Batch: 64255

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.196	0.1950		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 860-64086/12-A

Matrix: Solid

Analysis Batch: 64255

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64086

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.196	0.1996		mg/Kg		102	80 - 120	2	20

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: 830-2190-1 DU

Matrix: Solid

Analysis Batch: 64203

Client Sample ID: soil

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Flashpoint	>180		>180.0		Degrees F		NC	25

Eurofins El Paso

QC Association Summary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

GC Semi VOA

Analysis Batch: 63961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-64003/1-A	Method Blank	Total/NA	Solid	TX 1005	64003

Prep Batch: 64003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1 - RA2	soil	Total/NA	Solid	TX_1005_S_Pre	
MB 860-64003/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
LCS 860-64003/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
LCSD 860-64003/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	

Analysis Batch: 64139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-64003/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	64003
LCSD 860-64003/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	64003

Analysis Batch: 64160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1 - RA2	soil	Total/NA	Solid	TX 1005	64003

Metals

Prep Batch: 63903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	Total/NA	Solid	3051A	
MB 860-63903/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 860-63903/2-A	Lab Control Sample	Total/NA	Solid	3051A	
LCSD 860-63903/3-A	Lab Control Sample Dup	Total/NA	Solid	3051A	

Leach Batch: 64079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	TCLP	Solid	1311	
LB 860-64079/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 64086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	Total/NA	Solid	7471A	
MB 860-64086/10-A	Method Blank	Total/NA	Solid	7471A	
LCS 860-64086/11-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 860-64086/12-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Prep Batch: 64142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	TCLP	Solid	3010A	64079
LB 860-64079/1-C	Method Blank	TCLP	Solid	3010A	64079
MB 860-64142/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 860-64142/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 860-64142/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Eurofins El Paso

QC Association Summary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Metals

Analysis Batch: 64251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	Total/NA	Solid	6020A	63903
MB 860-63903/1-A	Method Blank	Total/NA	Solid	6020A	63903
LCS 860-63903/2-A	Lab Control Sample	Total/NA	Solid	6020A	63903
LCSD 860-63903/3-A	Lab Control Sample Dup	Total/NA	Solid	6020A	63903

Analysis Batch: 64255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	Total/NA	Solid	7471A	64086
MB 860-64086/10-A	Method Blank	Total/NA	Solid	7471A	64086
LCS 860-64086/11-A	Lab Control Sample	Total/NA	Solid	7471A	64086
LCSD 860-64086/12-A	Lab Control Sample Dup	Total/NA	Solid	7471A	64086

Analysis Batch: 64366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	TCLP	Solid	6010C	64142
LB 860-64079/1-C	Method Blank	TCLP	Solid	6010C	64142
MB 860-64142/1-A	Method Blank	Total/NA	Solid	6010C	64142
LCS 860-64142/2-A	Lab Control Sample	Total/NA	Solid	6010C	64142
LCSD 860-64142/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	64142

Analysis Batch: 64453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	Total/NA	Solid	6020A	63903

General Chemistry

Analysis Batch: 64203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
830-2190-1	soil	Total/NA	Solid	1010	
LCS 860-64203/1	Lab Control Sample	Total/NA	Solid	1010	
830-2190-1 DU	soil	Total/NA	Solid	1010	

Lab Chronicle

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Client Sample ID: soil

Lab Sample ID: 830-2190-1

Date Collected: 08/04/22 10:30

Matrix: Solid

Date Received: 08/04/22 12:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep	RA2		5.1 g	10 mL	64003	08/08/22 13:20	SAR	EET HOU
Total/NA	Analysis	TX 1005	RA2	10			64160	08/09/22 15:02	DD	EET HOU
TCLP	Leach	1311			1.0 g	1.0 mL	64079	08/08/22 16:00	EMC	EET HOU
TCLP	Prep	3010A			10 mL	50 mL	64142	08/09/22 10:00	MD	EET HOU
TCLP	Analysis	6010C		1			64366	08/09/22 19:17	DP	EET HOU
Total/NA	Prep	3051A			.59 g	50 mL	63903	08/09/22 13:08	PB	EET HOU
Total/NA	Analysis	6020A		10			64251	08/09/22 18:17	SHZ	EET HOU
Total/NA	Prep	3051A			.59 g	50 mL	63903	08/09/22 13:08	PB	EET HOU
Total/NA	Analysis	6020A		250			64453	08/10/22 18:27	SHZ	EET HOU
Total/NA	Prep	7471A			.51 g	50 mL	64086	08/09/22 05:46	AGR	EET HOU
Total/NA	Analysis	7471A		5			64255	08/09/22 14:36	SHZ	EET HOU
Total/NA	Analysis	1010		1			64203	08/09/22 14:28	JM	EET HOU

Laboratory References:

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

Accreditation/Certification Summary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Laboratory: Eurofins Houston

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23

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Method Summary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Method	Method Description	Protocol	Laboratory
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	EET HOU
6010C	Metals (ICP)	SW846	EET HOU
6020A	Metals (ICP/MS)	SW846	EET HOU
7471A	Mercury (CVAA)	SW846	EET HOU
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	EET HOU
1311	TCLP Extraction	SW846	EET HOU
3010A	Preparation, Total Metals	SW846	EET HOU
3051A	Preparation, Metals, Microwave Assisted	SW846	EET HOU
7471A	Preparation, Mercury	SW846	EET HOU
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	EET HOU

Protocol References:

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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

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

Sample Summary

Client: ACT Environmental Inc
Project/Site: Will Ruth Project

Job ID: 830-2190-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
830-2190-1	soil	Solid	08/04/22 10:30	08/04/22 12:01

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Chain of Custody

Work Order No.

Project Manager:	<i>Ternando Montes</i>	Bill to: (if different)	
Company Name:	<i>ACT ENVIRO</i>	Company Name:	
Address:	<i>511 Hwy 313</i>	Address:	
City, State ZIP:	<i>Chaparral NM 88084</i>	City, State ZIP:	
Phone:	<i>505.644-1455</i>	Email:	<i>montes@actenviro.com</i>

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

Project Name:		Will Rutter Project		Turn Around		Pres. Code		ANALYSIS REQUEST										Preservative Codes	
Project Number:		5609 Threadgill Ave		Routine <input type="checkbox"/> Rush: <u>1 DAY</u>												MeOH: Me			
Project Location				Rush: <u>1 DAY</u>												None: NO			
Sampler's Name:		Fernando Mendez		Due Date: <u>3/20/04</u>												HNO ₃ : HN			
PO #:				Quote #:												H ₂ SO ₄ : H2			

SAMPLE RECEIPT		Temp Blank:	Yes	Wet Ice:	Yes	No
Temperature (°C):	33.0/33.3	Thermometer ID				
Received intact:	Yes No					
Cooler Custody Seals:	Yes No	Correction Factor:				
Sample Custody Seals:	Yes No N/A	Total Containers:				

Number of Containers

CLP - Leachability

CLP - Chronic

CRA & m

X-1005

Stability


HCL: HL

NaOH: Na

Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab. it received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	Sample Comments
	Soil	S	8/13/03	10:50		01	3202 fur
						X	T
						X	T
						X	R
						X	T
						X	T



830-2190 Chain of Custody

Loc: 830
2190

Chain of Custody

Loc: 830
2190

Login Sample Receipt Checklist

Client: ACT Environmental Inc

Job Number: 830-2190-1

Login Number: 2190

List Source: Eurofins El Paso

List Number: 1

Creator: Aparicio, Niria

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

Login Sample Receipt Checklist

Client: ACT Environmental Inc

Job Number: 830-2190-1

Login Number: 2190

List Number: 2

Creator: Milone, Jeancarlo

List Source: Eurofins Houston

List Creation: 08/05/22 04:09 PM

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