



CTEH

June 09, 2025

Kyle Lawrence

5120 North Shore Drive

North Little Rock AR 72118

Project Name - PROJ-054017

Project Number - PROJ-054017

Attached are your analytical results for PROJ-054017 received by Origins Laboratory April 30, 2025. This project is associated with Origins project number E5E0006-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows: "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory
303.433.1322
projectmanager@originslab.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645



CTEH
5120 North Shore Drive
North Little Rock AR 72118

Kyle Lawrence
Project Number: PROJ-054017
Project: PROJ-054017

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GACO0430T158S001	E5E0006-01	Soil	April 30, 2025 16:15	04/30/2025 20:40

All Chromium Hexavalent samples in this workorder were prepared by EPA 3060A at Enthalpy Denver and analyzed by EPA 7199 at subcontract lab: Enthalpy Richmond. Both laboratories are TNI accredited for this analysis and meets statutory and regulatory requirements for this analysis. See NCM E25005.

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager

ORIGINS LABORATORY

CTEH
5120 North Shore Drive
North Little Rock AR 72118

Kyle Lawrence
Project Number: PROJ-054017
Project: PROJ-054017

Origins Laboratory F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: ESE0006 Client: CTEH
Client Project ID: Bishop Loss of Containment

Checklist Completed by: NKM/NKM Shipped Via: HD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)
Date/time completed: 05/01/25 Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
(Describe)

Cooler Number/Temperature: 1 / -0.3 °C

Thermometer ID: T 007

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ^{(1)?}		<input checked="" type="checkbox"/>		
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ^{(1)?}	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ^{(1)?}	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ^{(1)?}		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ^{(1)?}	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ^{(1)?}	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ^{(1)?}	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ^{(1)?}	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ^{(1)?} (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to be taken in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) NKM Date/Time Reviewed 05/01/25

Origins Laboratory



Jen Pellegrini For Jordan A. Bynon, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

GACO0430T158S001
4/30/2025 4:15:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5E0006-01 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.362		0.0993	mg/L	1	B5E0109	05/01/2025	05/05/2025	
Chromium Hexavalent by EPA 7199									
Hexavalent Chromium	ND		0.250	mg/kg	1	B5E0123	05/01/2025	05/21/2025	U
DRO/ORO by EPA 8015D									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5E0125	05/01/2025	05/01/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	80.6 %			50-150		"	"	"	
GBTEX+TMBs by 8260D									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5E0131	05/01/2025	05/01/2025	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

GACO0430T158S001
4/30/2025 4:15:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

E5E0006-01 (Soil)
Origins Laboratory

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	81.6 %			70-130		B5E0131	05/01/2025	05/01/2025	
Surrogate: Toluene-d8	96.3 %			70-130		"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %			70-130		"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	0.780		0.499	meq/L	10	[CALC]	05/01/2025	05/05/2025	
Magnesium	1.72		0.823	"	"	"	"	"	
Sodium	2.20		0.435	"	"	"	"	"	

PAH by EPA 8270E extracted via 3580A

1-Methylnaphthalene	ND		0.002	mg/kg	1	B5E0139	05/01/2025	05/01/2025	U
2-Methylnaphthalene	ND		0.002	"	"	"	"	"	U
Acenaphthene	ND		0.020	"	"	"	"	"	U
Anthracene	ND		0.020	"	"	"	"	"	U
Benzo (a) anthracene	ND		0.005	"	"	"	"	"	U
Benzo (a) pyrene	ND		0.020	"	"	"	"	"	U
Benzo (b) fluoranthene	ND		0.020	"	"	"	"	"	U
Benzo (k) fluoranthene	ND		0.020	"	"	"	"	"	U
Chrysene	ND		0.020	"	"	"	"	"	U
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	U

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

GACO0430T158S001
4/30/2025 4:15:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

E5E0006-01 (Soil)
Origins Laboratory

PAH by EPA 8270E extracted via 3580A

Fluoranthene	ND		0.020	mg/kg	1	B5E0139	05/01/2025	05/01/2025	U
Fluorene	ND		0.020	"	"	"	"	"	U
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	U
Naphthalene	ND		0.002	"	"	"	"	"	U
Pyrene	ND		0.020	"	"	"	"	"	U

Surrogate: Fluorene-d10	97.4 %			60-130		"	"	"	
Surrogate: Anthracene-d10	98.0 %			60-130		"	"	"	
Surrogate: Pyrene-d10	106 %			60-130		"	"	"	
Surrogate: Benzo (a) pyrene-d12	99.7 %			60-130		"	"	"	

pH in Soil by 9045D

pH	8.42			pH Units	1	B5E0117	05/01/2025	05/02/2025	
----	------	--	--	----------	---	---------	------------	------------	--

SAR by 20B Saturated Paste

SAR	1.96		0.0100	SAR	1	B5E0105	05/01/2025	05/05/2025	
-----	------	--	--------	-----	---	---------	------------	------------	--

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.526		0.00500	mmhos/cm	1	B5E0117	05/01/2025	05/02/2025	
---------------------------	-------	--	---------	----------	---	---------	------------	------------	--

Table 915 metals by EPA 6020B

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

GACO0430T158S001
4/30/2025 4:15:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

E5E0006-01 (Soil)
Origins Laboratory

Table 915 metals by EPA 6020B

Arsenic	2.68		0.250	mg/kg	10	B5E0133	05/01/2025	05/02/2025	
Barium	ND		70.8	"	"	"	"	"	U
Cadmium	ND		0.328	"	"	"	"	"	U
Copper	ND		39.7	"	"	"	"	"	U
Lead	ND		12.1	"	"	"	"	"	U
Nickel	ND		22.4	"	"	"	"	"	U
Selenium	ND		0.224	"	"	"	"	"	U
Silver	ND		0.691	"	"	"	"	"	U
Zinc	ND		319	"	"	"	"	"	U

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

***** DEFAULT GENERAL METHOD *** - Quality Control**
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E0123 - EPA 3060A										
Blank (B5E0123-BLK1)										
					Prepared: 05/01/2025 Analyzed: 05/21/2025					
Hexavalent Chromium	ND	0.250	mg/kg							U
LCS (B5E0123-BS1)										
					Prepared: 05/01/2025 Analyzed: 05/21/2025					
Hexavalent Chromium	2.42	0.250	mg/kg	2.50		97.0	80-120			
Matrix Spike (B5E0123-MS1)		Source: E5E0009-03			Prepared: 05/01/2025 Analyzed: 05/21/2025				QM-14	
Hexavalent Chromium	0.437	0.259	mg/kg	2.59	ND	16.9	75-125			
Matrix Spike (B5E0123-MS2)		Source: E5E0009-03			Prepared: 05/01/2025 Analyzed: 05/21/2025				QM-14	
Hexavalent Chromium	179	24.0	mg/kg	246	ND	72.9	75-125			
Matrix Spike Dup (B5E0123-MSD1)		Source: E5E0009-03			Prepared: 05/01/2025 Analyzed: 05/21/2025				QM-14, QR-03	
Hexavalent Chromium	0.157	0.258	mg/kg	2.58	ND	6.08	75-125	94.4	200	U
Post Spike (B5E0123-PS1)		Source: E5E0009-03			Prepared: 05/01/2025 Analyzed: 05/29/2025				QM-11	
Hexavalent Chromium	126		ug/L	100	0.00	126	80-120			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Classical Chemistry Parameters - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0105 - Saturated Paste Metals

Blank (B5E0105-BLK1)

Prepared: 05/01/2025 Analyzed: 05/05/2025

Calcium PPM	ND	10.0	mg/L							U
SAR	ND	0.0100	SAR							U
Magnesium PPM	ND	10.0	mg/L							U
Sodium PPM	ND	10.0	"							U

Duplicate (B5E0105-DUP1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/05/2025

SAR	ND	0.0100	SAR		7.74				200	U
Calcium PPM	35.3	10.0	mg/L		49.4			33.1	50	
Magnesium PPM	26.6	10.0	"		39.7			39.5	50	
Sodium PPM	233	10.0	"		301			25.5	50	

Batch B5E0109 - DTPA Sorbitol Preparation

Blank (B5E0109-BLK1)

Prepared: 05/01/2025 Analyzed: 05/05/2025

Boron	ND	0.100	mg/L							U
-------	----	-------	------	--	--	--	--	--	--	---

Duplicate (B5E0109-DUP1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/05/2025

Boron	2.02	0.0997	mg/L		1.96			3.21	50	
-------	------	--------	------	--	------	--	--	------	----	--

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0139 - EPA 3580

Blank (B5E0139-BLK1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

1-Methylnaphthalene	ND	0.002	mg/kg							U
2-Methylnaphthalene	ND	0.002	"							U
Acenaphthene	ND	0.020	"							U
Anthracene	ND	0.020	"							U
Benzo (a) anthracene	ND	0.005	"							U
Benzo (a) pyrene	ND	0.020	"							U
Benzo (b) fluoranthene	ND	0.020	"							U
Benzo (g,h,i) perylene	ND	0.020	"							U
Benzo (k) fluoranthene	ND	0.020	"							U
Chrysene	ND	0.020	"							U
Dibenz (a,h) anthracene	ND	0.020	"							U
Fluoranthene	ND	0.020	"							U
Fluorene	ND	0.020	"							U
Indeno (1,2,3-cd) pyrene	ND	0.020	"							U
Naphthalene	ND	0.002	"							U
Phenanthrene	ND	0.020	"							U
Pyrene	ND	0.020	"							U
Surrogate: Fluorene-d10	200		ug/kg	200		98.7	60-130			
Surrogate: Anthracene-d10	200		"	200		98.4	60-130			
Surrogate: Pyrene-d10	210		"	200		107	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		100	60-130			

LCS (B5E0139-BS1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

1-Methylnaphthalene	0.180	0.002	mg/kg	0.200		89.9	70-130
2-Methylnaphthalene	0.180	0.002	"	0.200		90.2	70-130
Acenaphthene	0.184	0.020	"	0.200		92.1	70-130
Anthracene	0.176	0.020	"	0.200		88.1	70-130

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0139 - EPA 3580

LCS (B5E0139-BS1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

Benzo (a) anthracene	0.186	0.005	mg/kg	0.200		92.8	70-130			
Benzo (a) pyrene	0.185	0.020	"	0.200		92.7	70-130			
Benzo (b) fluoranthene	0.191	0.020	"	0.200		95.5	70-130			
Benzo (g,h,i) perylene	0.203	0.020	"	0.200		102	70-130			
Benzo (k) fluoranthene	0.188	0.020	"	0.200		93.9	70-130			
Chrysene	0.185	0.020	"	0.200		92.6	70-130			
Dibenz (a,h) anthracene	0.193	0.020	"	0.200		96.5	70-130			
Fluoranthene	0.200	0.020	"	0.200		100	70-130			
Fluorene	0.180	0.020	"	0.200		89.8	70-130			
Indeno (1,2,3-cd) pyrene	0.191	0.020	"	0.200		95.7	70-130			
Naphthalene	0.199	0.002	"	0.200		99.3	70-130			
Phenanthrene	0.185	0.020	"	0.200		92.7	70-130			
Pyrene	0.200	0.020	"	0.200		99.8	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		98.4	60-130			
Surrogate: Anthracene-d10	200		"	200		98.0	60-130			
Surrogate: Pyrene-d10	210		"	200		106	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		99.9	60-130			

Matrix Spike (B5E0139-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

1-Methylnaphthalene	0.199	0.002	mg/kg	0.200	ND	99.7	70-130			
2-Methylnaphthalene	0.199	0.002	"	0.200	0.001	98.8	70-130			
Acenaphthene	0.195	0.020	"	0.200	0.0006	97.1	70-130			
Anthracene	0.191	0.020	"	0.200	ND	95.5	70-130			
Benzo (a) anthracene	0.194	0.005	"	0.200	ND	96.8	70-130			
Benzo (a) pyrene	0.205	0.020	"	0.200	ND	102	70-130			
Benzo (b) fluoranthene	0.198	0.020	"	0.200	0.0007	98.5	70-130			
Benzo (g,h,i) perylene	0.209	0.020	"	0.200	0.0006	104	70-130			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0139 - EPA 3580

Matrix Spike (B5E0139-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

Benzo (k) fluoranthene	0.194	0.020	mg/kg	0.200	ND	97.1	70-130			
Chrysene	0.191	0.020	"	0.200	0.0009	95.1	70-130			
Dibenz (a,h) anthracene	0.204	0.020	"	0.200	ND	102	70-130			
Fluoranthene	0.206	0.020	"	0.200	0.0009	103	70-130			
Fluorene	0.188	0.020	"	0.200	0.0006	93.7	70-130			
Indeno (1,2,3-cd) pyrene	0.208	0.020	"	0.200	ND	104	70-130			
Naphthalene	0.200	0.002	"	0.200	ND	100	70-130			
Phenanthrene	0.197	0.020	"	0.200	0.0009	98.0	70-130			
Pyrene	0.206	0.020	"	0.200	0.0009	103	70-130			
Surrogate: Fluorene-d10	190		ug/kg	200		96.7	60-130			
Surrogate: Anthracene-d10	200		"	200		98.7	60-130			
Surrogate: Pyrene-d10	200		"	200		102	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		100	60-130			

Matrix Spike Dup (B5E0139-MSD1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

1-Methylnaphthalene	0.206	0.002	mg/kg	0.200	ND	103	70-130	3.10	20	
2-Methylnaphthalene	0.207	0.002	"	0.200	0.001	103	70-130	4.28	20	
Acenaphthene	0.199	0.020	"	0.200	0.0006	99.1	70-130	2.06	20	
Anthracene	0.194	0.020	"	0.200	ND	97.2	70-130	1.84	20	
Benzo (a) anthracene	0.203	0.005	"	0.200	ND	102	70-130	4.75	20	
Benzo (a) pyrene	0.207	0.020	"	0.200	ND	104	70-130	1.24	20	
Benzo (b) fluoranthene	0.203	0.020	"	0.200	0.0007	101	70-130	2.68	20	
Benzo (g,h,i) perylene	0.212	0.020	"	0.200	0.0006	105	70-130	1.23	20	
Benzo (k) fluoranthene	0.205	0.020	"	0.200	ND	102	70-130	5.23	20	
Chrysene	0.205	0.020	"	0.200	0.0009	102	70-130	7.18	20	
Dibenz (a,h) anthracene	0.212	0.020	"	0.200	ND	106	70-130	3.75	20	
Fluoranthene	0.212	0.020	"	0.200	0.0009	106	70-130	2.85	20	

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0139 - EPA 3580

Matrix Spike Dup (B5E0139-MSD1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

Fluorene	0.191	0.020	mg/kg	0.200	0.0006	95.3	70-130	1.66	20	
Indeno (1,2,3-cd) pyrene	0.214	0.020	"	0.200	ND	107	70-130	2.64	20	
Naphthalene	0.205	0.002	"	0.200	ND	102	70-130	2.12	20	
Phenanthrene	0.204	0.020	"	0.200	0.0009	101	70-130	3.39	20	
Pyrene	0.212	0.020	"	0.200	0.0009	106	70-130	2.80	20	
Surrogate: Fluorene-d10	190		ug/kg	200		96.3	60-130			
Surrogate: Anthracene-d10	200		"	200		98.8	60-130			
Surrogate: Pyrene-d10	200		"	200		102	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0125 - EPA 3550B

Blank (B5E0125-BLK1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	23		"	24.9		93.1	50-150			

LCS (B5E0125-BS1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

Diesel (C10-C28)	913	50.0	mg/kg	1000		91.3	70-130			
Residual Range Organics (C28-C40)	1000	200	"	1000		100	70-130			
Surrogate: o-Terphenyl	61		"	49.8		123	50-150			

Matrix Spike (B5E0125-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

Diesel (C10-C28)	803	50.0	mg/kg	1000	ND	80.3	70-130			
Residual Range Organics (C28-C40)	906	200	"	1000	ND	90.6	70-130			
Surrogate: o-Terphenyl	51		"	49.8		103	50-150			

Matrix Spike Dup (B5E0125-MSD1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

Diesel (C10-C28)	796	50.0	mg/kg	1000	ND	79.6	70-130	0.850	35	
Residual Range Organics (C28-C40)	890	200	"	1000	ND	89.0	70-130	1.83	35	
Surrogate: o-Terphenyl	56		"	49.8		112	50-150			

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0133 - EPA 3050B

Blank (B5E0133-BLK1)

Prepared: 05/01/2025 Analyzed: 05/02/2025

Arsenic	ND	0.290	mg/kg							U
Barium	ND	82.0	"							U
Cadmium	ND	0.380	"							U
Copper	ND	46.0	"							U
Lead	ND	14.0	"							U
Nickel	ND	26.0	"							U
Selenium	ND	0.260	"							U
Silver	ND	0.800	"							U
Zinc	ND	370	"							U

LCS (B5E0133-BS1)

Prepared: 05/01/2025 Analyzed: 05/02/2025

Arsenic	5.48	0.290	mg/kg	5.00		110	80-120			
Barium	556	82.0	"	500		111	80-120			
Cadmium	5.46	0.380	"	5.00		109	80-120			
Copper	57.4	46.0	"	50.0		115	80-120			
Lead	5.41	14.0	"	5.00		108	80-120			U
Nickel	5.68	26.0	"	5.00		114	80-120			U
Selenium	5.44	0.260	"	5.00		109	80-120			
Silver	5.41	0.800	"	5.00		108	80-120			
Zinc	57.3	370	"	50.0		115	80-120			U

Matrix Spike (B5E0133-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/02/2025

Arsenic	12.4	0.273	mg/kg	4.71	4.31	171	75-125			QM-07
Barium	636	77.3	"	471	107	112	75-125			
Cadmium	5.42	0.358	"	4.71	0.261	109	75-125			
Copper	85.6	43.4	"	47.1	28.5	121	75-125			
Lead	15.5	13.2	"	4.71	9.50	127	75-125			QM-07

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0133 - EPA 3050B

Matrix Spike (B5E0133-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/02/2025

Nickel	17.1	24.5	mg/kg	4.71	10.3	145	75-125			QM-07, U
Selenium	5.40	0.245	"	4.71	0.408	106	75-125			
Silver	5.12	0.754	"	4.71	0.0435	108	75-125			
Zinc	126	349	"	47.1	67.1	126	75-125			QM-07, U

Matrix Spike Dup (B5E0133-MSD1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/02/2025

Arsenic	15.0	0.269	mg/kg	4.63	4.31	231	75-125	19.5	20	QM-07
Barium	649	76.0	"	463	107	117	75-125	2.00	20	
Cadmium	5.41	0.352	"	4.63	0.261	111	75-125	0.221	20	
Copper	85.2	42.6	"	46.3	28.5	122	75-125	0.465	20	
Lead	16.0	13.0	"	4.63	9.50	140	75-125	3.24	20	QM-07
Nickel	20.1	24.1	"	4.63	10.3	213	75-125	16.3	20	QM-07, U
Selenium	5.71	0.241	"	4.63	0.408	115	75-125	5.54	20	
Silver	5.05	0.741	"	4.63	0.0435	108	75-125	1.46	20	
Zinc	146	343	"	46.3	67.1	171	75-125	14.6	20	QM-07, U

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Saturated Paste - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0117 - Saturated Paste pH/EC

Blank (B5E0117-BLK1)

Prepared: 05/01/2025 Analyzed: 05/02/2025

Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
---------------------------	----	---------	----------	--	--	--	--	--	--	---

Duplicate (B5E0117-DUP1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/02/2025

Specific Conductance (EC)	2.26	0.00500	mmhos/cm		2.79			20.8		25
pH	8.60		pH Units		8.65			0.580		25

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0131 - EPA 5030 (soil)

Blank (B5E0131-BLK1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.091		"	0.125		72.9	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

LCS (B5E0131-BS1)

Prepared: 05/01/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	0.119	0.00200	mg/kg	0.100		119	70-130			
1,3,5-Trimethylbenzene	0.120	0.00200	"	0.100		120	70-130			
Benzene	0.105	0.00200	"	0.100		105	70-130			
Ethylbenzene	0.117	0.00200	"	0.100		117	70-130			
Naphthalene	0.0879	0.00380	"	0.100		87.9	70-130			
Toluene	0.103	0.00200	"	0.100		103	70-130			
o-Xylene	0.118	0.00200	"	0.100		118	70-130			
m,p-Xylene	0.237	0.00400	"	0.200		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.088		"	0.125		70.7	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		98.7	70-130			

Matrix Spike (B5E0131-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	0.0997	0.00200	mg/kg	0.100	ND	99.7	70-130			
------------------------	--------	---------	-------	-------	----	------	--------	--	--	--

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Jordan A. Bynon, Project Manager



CTEH
 5120 North Shore Drive
 North Little Rock AR 72118

Kyle Lawrence
 Project Number: PROJ-054017
 Project: PROJ-054017

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B5E0131 - EPA 5030 (soil)

Matrix Spike (B5E0131-MS1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

1,3,5-Trimethylbenzene	0.101	0.00200	mg/kg	0.100	ND	101	70-130			
Benzene	0.0905	0.00200	"	0.100	ND	90.5	70-130			
Ethylbenzene	0.118	0.00200	"	0.100	ND	118	70-130			
Naphthalene	0.0537	0.00380	"	0.100	ND	53.7	70-130			QM-07
Toluene	0.0919	0.00200	"	0.100	ND	91.9	70-130			
o-Xylene	0.119	0.00200	"	0.100	ND	119	70-130			
m,p-Xylene	0.234	0.00400	"	0.200	ND	117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.089		"	0.125		71.5	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		106	70-130			
Surrogate: 4-Bromofluorobenzene	0.14		"	0.125		114	70-130			

Matrix Spike Dup (B5E0131-MSD1)

Source: E5E0009-03

Prepared: 05/01/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	0.0746	0.00200	mg/kg	0.100	ND	74.6	70-130	28.7	20	QR-02
1,3,5-Trimethylbenzene	0.0764	0.00200	"	0.100	ND	76.4	70-130	28.0	20	QR-02
Benzene	0.0788	0.00200	"	0.100	ND	78.8	70-130	13.8	20	
Ethylbenzene	0.0907	0.00200	"	0.100	ND	90.7	70-130	26.2	20	QR-02
Naphthalene	0.0410	0.00380	"	0.100	ND	41.0	70-130	26.7	20	QM-07
Toluene	0.0750	0.00200	"	0.100	ND	75.0	70-130	20.2	20	QR-02
o-Xylene	0.0917	0.00200	"	0.100	ND	91.7	70-130	25.8	20	QR-02
m,p-Xylene	0.183	0.00400	"	0.200	ND	91.3	70-130	24.8	20	QR-02
Surrogate: 1,2-Dichloroethane-d4	0.096		"	0.125		76.7	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.14		"	0.125		112	70-130			

Origins Laboratory

Jen Pellegrini For Jordan A. Bynon, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CTEH
5120 North Shore Drive
North Little Rock AR 72118

Kyle Lawrence
Project Number: PROJ-054017
Project: PROJ-054017

Notes and Definitions

- U Sample is Non-Detect.
- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QM-14 The pre-digestion matrix spike recoveries for Cr6 were less than the acceptance range min. The soil sample reduced Cr6 and no measurable native Cr6 existed in the unspiked sample. Batch QC deemed acceptable based on passing LCS recovery.
- QM-11 Spike recovery was outside acceptance limits for LCS, however samples are non-detect for this compound.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- All soil results are reported on a wet weight basis.

Origins Laboratory



Jen Pellegrini For Jordan A. Bynon, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.