



**CTEH**

**June 06, 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 May 29, 2025. This project is associated with Origins project number E5E1002-01.

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
GACO0528T149-2S001	E5E1002-01	Soil	May 28, 2025 11:30	05/29/2025 07:45

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

<b>Enthalpy Analytical - Denver</b> 1725 W. 84th Ave., Denver, CO 80211 Phone: 303-453-1122		Lab No: <b>55E1002</b> Page: 1 of 2 Standard: 1 Day 5 Day 3 Day Custom TAT ASAP	
<b>CUSTOMER INFORMATION</b> Company: CTEH Project To: Remediation of surface water, storm water, and groundwater Contact: Jennifer Pellegrini (jennifer.pellegrini@enthalpy.com) Address: 5200 Westview Dr, North Little Rock, AR 72118 Phone: (501) 666-1111 Email: jennifer.pellegrini@enthalpy.com		<b>PROJECT INFORMATION</b> Name: PROJ-054017 Number: 2860 P.O. #: 2860 Address: Selection, CO Site Name: Site Address: Global ID: Sampled By: Matthew Beck	
<b>ANALYSIS REQUEST</b> Matrix: A=Air S=Soil W=Water DW=Drinking Water P=Product O=Oil C=Composite SO=Soilment I=Issue WP=Type MW=Waterborne K=Other B=Blank O=Other Preservatives: 0=none 1=HClO <sub>2</sub> 2=HCl 3=HNO <sub>3</sub> 4=H <sub>2</sub> SO <sub>4</sub> 5=HCl 6=Other Sample Receipt Temp and Notes: 2.6°C (Ice)		<b>TEST INSTRUCTIONS / COMMENTS</b> Analysis Request: Table 915, minus Chromium VI VOCs: 8260D MS/MSD Initials: MB	
Sample ID: 640095381149-2860 Sampling Date: 5/28/2025 Sampling Time (Hr): 11:30 Method Type: G Pres. No.: 8 Size: 2 Cont. Cont.: 4 oz NP: X	Signature: [Signature] Print Name: Matthew Beck Company/Title: CTEH Date/Time: 05/28/25 07:45		
Relinquished By: Received By: Relinquished By: Received By:	Date/Time: 05/28/25 07:45		

Origins Laboratory

*Jen Pellegrini*

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: ESE1002 Client: CTEH  
 Checklist Completed by: NKM/NB Client Project ID: PROJ-054017  
 Date/time completed: 05/29/25 Shipped Via: HD  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 1, 2.6 °C (Describe)  
 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 <sup>(1)</sup> ?	<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 <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analytes in order to insure sample integrity) (pH < 2 for samples preserved with HNO <sub>3</sub> , HCl, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with Na <sub>2</sub> O <sub>2</sub> +NaOH, ZnAc <sub>2</sub> +NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup>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 in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) EHD

Date/Time Reviewed 5/29/25

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

**GACO0528T149-2S001**  
**5/28/2025 11:30:00AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5E1002-01 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	0.837		0.0998	mg/L	1	B5E2908	05/29/2025	06/02/2025	
<b>DRO/ORO by EPA 8015D</b>									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5E2925	05/29/2025	05/29/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	109 %			50-150		"	"	"	
<b>GBTEX+TMBs by 8260D</b>									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5E2924	05/29/2025	05/29/2025	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
Surrogate: 1,2-Dichloroethane-d4	121 %			70-130		"	"	"	
Surrogate: Toluene-d8	99.0 %			70-130		"	"	"	
Surrogate: 4-Bromofluorobenzene	98.2 %			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

**GACO0528T149-2S001**  
**5/28/2025 11:30:00AM**

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

**E5E1002-01 (Soil)**  
**Origins Laboratory**

**Metals by Saturated Paste by EPA 6010**

Calcium	29.5		0.499	meq/L	10	[CALC]	05/29/2025	05/30/2025	
Magnesium	10.0		0.823	"	"	"	"	"	
Sodium	19.7		0.435	"	"	"	"	"	

**PAH by EPA 8270E extracted via 3580A**

1-Methylnaphthalene	ND		0.002	mg/kg	1	B5E2922	05/29/2025	05/29/2025	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
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
Pyrene	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

**GACO0528T149-2S001**  
**5/28/2025 11:30:00AM**

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

**E5E1002-01 (Soil)**  
**Origins Laboratory**

**PAH by EPA 8270E extracted via 3580A**

Surrogate: Fluorene-d10	103 %			60-130		B5E2922	05/29/2025	05/29/2025	
Surrogate: Anthracene-d10	102 %			60-130		"	"	"	
Surrogate: Pyrene-d10	101 %			60-130		"	"	"	
Surrogate: Benzo (a) pyrene-d12	97.7 %			60-130		"	"	"	

**pH in Soil by 9045D**

pH	7.65			pH Units	1	B5E2913	05/29/2025	05/30/2025	
----	------	--	--	----------	---	---------	------------	------------	--

**SAR by 20B Saturated Paste**

SAR	4.44		0.0100	SAR	1	B5E2904	05/29/2025	05/30/2025	
-----	------	--	--------	-----	---	---------	------------	------------	--

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	6.20		0.00500	mmhos/cm	1	B5E2913	05/29/2025	05/30/2025	
---------------------------	------	--	---------	----------	---	---------	------------	------------	--

**Table 915 metals by EPA 6020B**

Arsenic	3.81		0.249	mg/kg	10	B5E2932	05/29/2025	05/29/2025	
Barium	93.4		70.4	"	"	"	"	"	
Cadmium	ND		0.326	"	"	"	"	"	U
Copper	ND		39.5	"	"	"	"	"	U
Lead	ND		12.0	"	"	"	"	"	U
Nickel	ND		22.3	"	"	"	"	"	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

**GACO0528T149-2S001**  
**5/28/2025 11:30:00AM**

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

**E5E1002-01 (Soil)**  
**Origins Laboratory**

**Table 915 metals by EPA 6020B**

Selenium	0.263		0.223	mg/kg	10	B5E2932	05/29/2025	05/29/2025	
Silver	ND		0.686	"	"	"	"	"	U
Zinc	ND		317	"	"	"	"	"	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

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory**

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

**Batch B5E2904 - Saturated Paste Metals**

**Blank (B5E2904-BLK1)**

Prepared: 05/29/2025 Analyzed: 05/30/2025

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 (B5E2904-DUP1)**

Source: E5E0994-09

Prepared: 05/29/2025 Analyzed: 05/30/2025

Calcium PPM	50.4	10.0	mg/L		44.0			13.6	50	
SAR	ND	0.0100	SAR		0.0851				200	U
Magnesium PPM	7.26	10.0	mg/L		6.33			13.7	50	U
Sodium PPM	2.40	10.0	"		2.28			5.13	50	U

**Batch B5E2908 - DTPA Sorbitol Preparation**

**Blank (B5E2908-BLK1)**

Prepared: 05/29/2025 Analyzed: 06/02/2025

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

**Duplicate (B5E2908-DUP1)**

Source: E5E0994-09

Prepared: 05/29/2025 Analyzed: 06/02/2025

Boron	0.474	0.0999	mg/L		0.512			7.75	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 B5E2922 - EPA 3580**

**Blank (B5E2922-BLK1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

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	210		ug/kg	200		104	60-130			
Surrogate: Anthracene-d10	210		"	200		103	60-130			
Surrogate: Pyrene-d10	210		"	200		104	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		95.5	60-130			

**LCS (B5E2922-BS1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

1-Methylnaphthalene	0.214	0.002	mg/kg	0.200		107	70-130			
2-Methylnaphthalene	0.214	0.002	"	0.200		107	70-130			
Acenaphthene	0.220	0.020	"	0.200		110	70-130			
Anthracene	0.213	0.020	"	0.200		106	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 B5E2922 - EPA 3580**

**LCS (B5E2922-BS1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Benzo (a) anthracene	0.232	0.005	mg/kg	0.200		116	70-130			
Benzo (a) pyrene	0.198	0.020	"	0.200		98.9	70-130			
Benzo (b) fluoranthene	0.187	0.020	"	0.200		93.6	70-130			
Benzo (g,h,i) perylene	0.178	0.020	"	0.200		88.9	70-130			
Benzo (k) fluoranthene	0.178	0.020	"	0.200		89.0	70-130			
Chrysene	0.204	0.020	"	0.200		102	70-130			
Dibenz (a,h) anthracene	0.215	0.020	"	0.200		108	70-130			
Fluoranthene	0.215	0.020	"	0.200		107	70-130			
Fluorene	0.221	0.020	"	0.200		110	70-130			
Indeno (1,2,3-cd) pyrene	0.213	0.020	"	0.200		107	70-130			
Naphthalene	0.215	0.002	"	0.200		108	70-130			
Phenanthrene	0.215	0.020	"	0.200		108	70-130			
Pyrene	0.219	0.020	"	0.200		110	70-130			
Surrogate: Fluorene-d10	210		ug/kg	200		104	60-130			
Surrogate: Anthracene-d10	200		"	200		102	60-130			
Surrogate: Pyrene-d10	210		"	200		103	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		96.3	60-130			

**Matrix Spike (B5E2922-MS1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

1-Methylnaphthalene	0.223	0.002	mg/kg	0.200	ND	111	70-130			
2-Methylnaphthalene	0.223	0.002	"	0.200	ND	112	70-130			
Acenaphthene	0.226	0.020	"	0.200	0.0006	113	70-130			
Anthracene	0.224	0.020	"	0.200	0.0005	112	70-130			
Benzo (a) anthracene	0.234	0.005	"	0.200	0.004	115	70-130			
Benzo (a) pyrene	0.222	0.020	"	0.200	0.005	109	70-130			
Benzo (b) fluoranthene	0.196	0.020	"	0.200	0.004	95.9	70-130			
Benzo (g,h,i) perylene	0.181	0.020	"	0.200	0.003	88.6	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 B5E2922 - EPA 3580**

**Matrix Spike (B5E2922-MS1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Benzo (k) fluoranthene	0.190	0.020	mg/kg	0.200	0.002	94.1	70-130			
Chrysene	0.212	0.020	"	0.200	0.005	103	70-130			
Dibenz (a,h) anthracene	0.230	0.020	"	0.200	ND	115	70-130			
Fluoranthene	0.229	0.020	"	0.200	0.006	112	70-130			
Fluorene	0.225	0.020	"	0.200	ND	112	70-130			
Indeno (1,2,3-cd) pyrene	0.219	0.020	"	0.200	0.003	108	70-130			
Naphthalene	0.222	0.002	"	0.200	ND	111	70-130			
Phenanthrene	0.223	0.020	"	0.200	0.001	111	70-130			
Pyrene	0.229	0.020	"	0.200	0.006	111	70-130			
Surrogate: Fluorene-d10	210		ug/kg	200		104	60-130			
Surrogate: Anthracene-d10	200		"	200		101	60-130			
Surrogate: Pyrene-d10	200		"	200		102	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		97.2	60-130			

**Matrix Spike Dup (B5E2922-MSD1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

1-Methylnaphthalene	0.215	0.002	mg/kg	0.200	ND	108	70-130	3.24	20	
2-Methylnaphthalene	0.215	0.002	"	0.200	ND	107	70-130	3.80	20	
Acenaphthene	0.219	0.020	"	0.200	0.0006	109	70-130	3.12	20	
Anthracene	0.215	0.020	"	0.200	0.0005	107	70-130	4.09	20	
Benzo (a) anthracene	0.229	0.005	"	0.200	0.004	113	70-130	1.83	20	
Benzo (a) pyrene	0.196	0.020	"	0.200	0.005	95.7	70-130	12.4	20	
Benzo (b) fluoranthene	0.183	0.020	"	0.200	0.004	89.6	70-130	6.69	20	
Benzo (g,h,i) perylene	0.170	0.020	"	0.200	0.003	83.2	70-130	6.16	20	
Benzo (k) fluoranthene	0.177	0.020	"	0.200	0.002	87.6	70-130	7.04	20	
Chrysene	0.212	0.020	"	0.200	0.005	103	70-130	0.0893	20	
Dibenz (a,h) anthracene	0.212	0.020	"	0.200	ND	106	70-130	8.23	20	
Fluoranthene	0.223	0.020	"	0.200	0.006	109	70-130	2.65	20	

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

**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 B5E2922 - EPA 3580**

**Matrix Spike Dup (B5E2922-MSD1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Fluorene	0.219	0.020	mg/kg	0.200	ND	110	70-130	2.55	20	
Indeno (1,2,3-cd) pyrene	0.209	0.020	"	0.200	0.003	103	70-130	4.34	20	
Naphthalene	0.215	0.002	"	0.200	ND	107	70-130	3.34	20	
Phenanthrene	0.216	0.020	"	0.200	0.001	108	70-130	2.90	20	
Pyrene	0.227	0.020	"	0.200	0.006	111	70-130	0.514	20	
Surrogate: Fluorene-d10	210		ug/kg	200		104	60-130			
Surrogate: Anthracene-d10	200		"	200		102	60-130			
Surrogate: Pyrene-d10	210		"	200		103	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		94.7	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 B5E2925 - EPA 3550B**

**Blank (B5E2925-BLK1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	28		"	24.9		111	50-150			

**LCS (B5E2925-BS1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Diesel (C10-C28)	840	50.0	mg/kg	1000		84.0	70-130			
Residual Range Organics (C28-C40)	853	200	"	1000		85.3	70-130			
Surrogate: o-Terphenyl	52		"	49.8		104	50-150			

**Matrix Spike (B5E2925-MS1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Diesel (C10-C28)	917	50.0	mg/kg	1000	ND	91.7	70-130			
Residual Range Organics (C28-C40)	926	200	"	1000	ND	92.6	70-130			
Surrogate: o-Terphenyl	55		"	49.8		110	50-150			

**Matrix Spike Dup (B5E2925-MSD1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Diesel (C10-C28)	905	50.0	mg/kg	1000	ND	90.5	70-130	1.26	35	
Residual Range Organics (C28-C40)	938	200	"	1000	ND	93.8	70-130	1.36	35	
Surrogate: o-Terphenyl	55		"	49.8		110	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 B5E2932 - EPA 3050B**

**Blank (B5E2932-BLK1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

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 (B5E2932-BS1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Arsenic	5.36	0.290	mg/kg	5.00		107	80-120			
Barium	558	82.0	"	500		112	80-120			
Cadmium	5.54	0.380	"	5.00		111	80-120			
Copper	53.9	46.0	"	50.0		108	80-120			
Lead	5.13	14.0	"	5.00		103	80-120			U
Nickel	5.52	26.0	"	5.00		110	80-120			U
Selenium	5.60	0.260	"	5.00		112	80-120			
Silver	5.93	0.800	"	5.00		119	80-120			
Zinc	59.4	370	"	50.0		119	80-120			U

**Matrix Spike (B5E2932-MS1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Arsenic	9.71	0.278	mg/kg	4.79	4.44	110	75-125			
Barium	610	78.5	"	479	68.8	113	75-125			
Cadmium	5.48	0.364	"	4.79	0.220	110	75-125			
Copper	65.9	44.1	"	47.9	11.7	113	75-125			
Lead	26.1	13.4	"	4.79	20.7	112	75-125			

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 B5E2932 - EPA 3050B**

**Matrix Spike (B5E2932-MS1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Nickel	12.7	24.9	mg/kg	4.79	8.11	95.6	75-125			U
Selenium	5.76	0.249	"	4.79	0.247	115	75-125			
Silver	5.60	0.766	"	4.79	0.0472	116	75-125			
Zinc	112	354	"	47.9	66.5	95.5	75-125			U

**Matrix Spike Dup (B5E2932-MSD1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

Arsenic	9.06	0.284	mg/kg	4.89	4.44	94.5	75-125	6.96	20	
Barium	577	80.2	"	489	68.8	104	75-125	5.55	20	
Cadmium	5.33	0.372	"	4.89	0.220	104	75-125	2.78	20	
Copper	62.2	45.0	"	48.9	11.7	103	75-125	5.74	20	
Lead	29.0	13.7	"	4.89	20.7	170	75-125	10.6	20	QM-4X
Nickel	12.1	25.4	"	4.89	8.11	81.3	75-125	4.91	20	U
Selenium	5.37	0.254	"	4.89	0.247	105	75-125	6.93	20	
Silver	5.44	0.782	"	4.89	0.0472	110	75-125	2.87	20	
Zinc	113	362	"	48.9	66.5	95.6	75-125	0.928	20	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 B5E2913 - Saturated Paste pH/EC**

**Blank (B5E2913-BLK1)**

Prepared: 05/29/2025 Analyzed: 05/30/2025

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

**Duplicate (B5E2913-DUP1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/30/2025

Specific Conductance (EC)	0.400	0.00500	mmhos/cm		0.375			6.32	25	
pH	7.49		pH Units		7.72			3.02	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 B5E2924 - EPA 5030 (soil)**

**Blank (B5E2924-BLK1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

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	0.13		"	0.125	106		70-130			
Surrogate: Toluene-d8	0.12		"	0.125	99.1		70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125	102		70-130			

**LCS (B5E2924-BS1)**

Prepared: 05/29/2025 Analyzed: 05/29/2025

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	0.0987	0.00200	"	0.100	98.7		70-130			
Ethylbenzene	0.101	0.00200	"	0.100	101		70-130			
Naphthalene	0.0956	0.00380	"	0.100	95.6		70-130			
Toluene	0.101	0.00200	"	0.100	101		70-130			
o-Xylene	0.108	0.00200	"	0.100	108		70-130			
m,p-Xylene	0.211	0.00400	"	0.200	106		70-130			
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125	110		70-130			
Surrogate: Toluene-d8	0.13		"	0.125	102		70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125	94.0		70-130			

**Matrix Spike (B5E2924-MS1)**

Source: E5E0994-09

Prepared: 05/29/2025 Analyzed: 05/29/2025

1,2,4-Trimethylbenzene	0.115	0.00200	mg/kg	0.100	ND	115	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 B5E2924 - EPA 5030 (soil)**

**Matrix Spike (B5E2924-MS1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

1,3,5-Trimethylbenzene	0.114	0.00200	mg/kg	0.100	ND	114	70-130			
Benzene	0.106	0.00200	"	0.100	ND	106	70-130			
Ethylbenzene	0.103	0.00200	"	0.100	ND	103	70-130			
Naphthalene	0.0723	0.00380	"	0.100	0.00212	70.2	70-130			
Toluene	0.103	0.00200	"	0.100	ND	103	70-130			
o-Xylene	0.111	0.00200	"	0.100	ND	111	70-130			
m,p-Xylene	0.214	0.00400	"	0.200	ND	107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.15		"	0.125		121	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		97.0	70-130			

**Matrix Spike Dup (B5E2924-MSD1)**

**Source: E5E0994-09**

Prepared: 05/29/2025 Analyzed: 05/29/2025

1,2,4-Trimethylbenzene	0.110	0.00200	mg/kg	0.100	ND	110	70-130	4.11	20	
1,3,5-Trimethylbenzene	0.109	0.00200	"	0.100	ND	109	70-130	4.09	20	
Benzene	0.107	0.00200	"	0.100	ND	107	70-130	1.52	20	
Ethylbenzene	0.132	0.00200	"	0.100	ND	132	70-130	24.2	20	QM-07
Naphthalene	0.0800	0.00380	"	0.100	0.00212	77.9	70-130	10.1	20	
Toluene	0.104	0.00200	"	0.100	ND	104	70-130	1.02	20	
o-Xylene	0.131	0.00200	"	0.100	ND	131	70-130	16.7	20	QM-07
m,p-Xylene	0.260	0.00400	"	0.200	ND	130	70-130	19.7	20	
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		112	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		98.8	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

### Notes and Definitions

- U Sample is Non-Detect.
  - QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
  - 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

*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