



CTEH

Kyle Lawrence

5120 North Shore Drive

North Little Rock AR 72118

June 05, 2025

Project Name - PROJ-054017

Project Number - PROJ-054017

Attached are your analytical results for PROJ-054017 received by Origins Laboratory May 15, 2025. This project is associated with Origins project number E5E0476-01.

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
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GACO0514T167-1S001	E5E0476-01	Soil	May 14, 2025 10:51	05/15/2025 07:45
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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

ENTHALPY ANALYTICAL		Chain of Custody Record		Turn Around Time (rush by advanced notice only)			
Lab No: E5E0476		Page: 1 of 1		Standard	2 Day	5 Day	3 Day
ENTHALPY ANALYTICAL Denver 1725 W. Elk Place, Denver, CO 80211 Phone: 303-433-1322		Matrix: A = Air S = Soil Solid W = Water DW = Drinking Water P = Product O = Oil SD = Sediment T = Tissue WP = Wipe WW = Wastewater X = Other		Sample Type: Composite Grab or Discrete Blank Other			
CUSTOMER INFORMATION Company: CTEH Report To: Cheryl Bishop, Kyle Lawrence, Eric Collins, Andrew Hensley, Tamel McMillin, Madelyn Shikman Email: cheryl.bishop@cteh.com, kyle.lawrence@cteh.com, eric.collins@cteh.com, andrew.hensley@cteh.com, tamel.mcmillin@cteh.com, madelyn.shikman@cteh.com Address: 5120 Northshore Dr, North Little Rock, AR 72114 Phone: 501-225-1111 Billing Instructions: cteh@montrose-env.com		PROJECT INFORMATION Name: PROJ-054017 Bishop Loss of Containment Number: P.O. #: Address: Gallatin, CO Site Name: Global ID: Sampled By: Ally Scott		Analysis Request Preservatives: 0 = none 1 = Na2S2O3 2 = HCl 3 = HNO3 4 = H2SO4 5 = NaOH 6 = Other (lab use only)			
Test Instructions / Comments VOCs 8260D Table 915		Analysis Request Preservatives: 0 = none 1 = Na2S2O3 2 = HCl 3 = HNO3 4 = H2SO4 5 = NaOH 6 = Other (lab use only)					
Sample ID 1 GC085147167-15081 2 3 4 5 6 7 8 9 10		Sampling Date: 5/14/2025 Time (24 hr): 10:51 S Matrix: G Type: G Pres.: 0 No.: 3 Cont. No.: 3 Cont. Sire: 4 Cont. Initials: AS		Analysis Request Preservatives: 0 = none 1 = Na2S2O3 2 = HCl 3 = HNO3 4 = H2SO4 5 = NaOH 6 = Other (lab use only)			
Signature Relinquished By: <i>[Signature]</i> Received By: NKI Relinquished By: Received By: Relinquished By: Received By:		Print Name Relinquished By: Alex Scott Received By: Nikki Meraviglia Relinquished By: Received By: Relinquished By: Received By:		Company / Title Relinquished By: CTEH Received By: ENTHALPY Relinquished By: Received By: Relinquished By: Received By:			
Date / Time Relinquished By: 5/14/25 1600 Received By: 5/14/25 1100 Relinquished By: Received By: 05/15/25 07:45 Relinquished By: Received By:							

Origins Laboratory

Byron

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LABORATORY

CTEH
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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: E3E0476

Client: CTEH

Client Project ID: PROJ-054017

Checklist Completed by: NKM/

Shipped Via: HD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 05/15/25

Airbill #: N/A

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid

☐ Water

☐ Other:

(Describe)

Cooler Number/Temperature: 1 / 3.3 °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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input 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 HNO ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with Na ₂ CO ₃ +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) NKM

Date/Time Reviewed 05/15/25

Origins Laboratory

J. Bynon

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Jordan A. Bynon, Project Manager



CTEH
5120 North Shore Drive
North Little Rock AR 72118

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

GACO0514T167-1S001

5/14/2025 10:51:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5E0476-01 (Soil) Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	1.35		0.100	mg/L	1	B5E1507	05/15/2025	05/16/2025	
Chromium Hexavalent by EPA 7199									
Hexavalent Chromium	ND		0.250	mg/kg	1	B5E1514	05/15/2025	06/03/2025	
DRO/ORO by EPA 8015D									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5E1501	05/15/2025	05/15/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	92.7 %			50-150		"	"	"	
GBTEX+TMBs by 8260D									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5E1472	05/15/2025	05/15/2025	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

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5/14/2025 10:51:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5E0476-01 (Soil)
Origins Laboratory

GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	106 %		70-130			B5E1472	05/15/2025	05/15/2025	
Surrogate: Toluene-d8	104 %		70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.64	0.499	meq/L	10	[CALC]		05/15/2025	05/16/2025	
Magnesium	1.88	0.823	"	"	"	"	"	"	
Sodium	4.16	0.435	"	"	"	"	"	"	

PAH by EPA 8270E extracted via 3580A

1-Methylnaphthalene	ND	0.002	mg/kg	1	B5E1523	05/15/2025	05/15/2025		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

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GACO0514T167-1S001

5/14/2025 10:51:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5E0476-01 (Soil)
Origins Laboratory

PAH by EPA 8270E extracted via 3580A

Fluoranthene	ND	0.020	mg/kg	1	B5E1523	05/15/2025	05/15/2025	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	99.6 %	60-130	"	"	"
Surrogate: Anthracene-d10	100 %	60-130	"	"	"
Surrogate: Pyrene-d10	109 %	60-130	"	"	"
Surrogate: Benzo (a) pyrene-d12	106 %	60-130	"	"	"

pH in Soil by 9045D

pH	8.05	pH Units	1	B5E1515	05/15/2025	05/16/2025
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SAR by 20B Saturated Paste

SAR	2.77	0.0100	SAR	1	B5E1509	05/15/2025	05/16/2025
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.14	0.00500	mmhos/cm	1	B5E1515	05/15/2025	05/16/2025
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Table 915 metals by EPA 6020B

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5/14/2025 10:51:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5E0476-01 (Soil)
Origins Laboratory

Table 915 metals by EPA 6020B

Arsenic	4.76	0.258	mg/kg	10	B5E1526	05/15/2025	05/16/2025
Barium	118	72.9	"	"	"	"	"
Cadmium	ND	0.338	"	"	"	"	"
Copper	ND	40.9	"	"	"	"	"
Lead	ND	12.5	"	"	"	"	"
Nickel	ND	23.1	"	"	"	"	"
Selenium	0.397	0.231	"	"	"	"	"
Silver	ND	0.711	"	"	"	"	"
Zinc	ND	329	"	"	"	"	"

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*** DEFAULT GENERAL METHOD *** - Quality Control

Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5E1514 - EPA 3060A										
Blank (B5E1514-BLK1)					Prepared: 05/15/2025 Analyzed: 06/03/2025					
Hexavalent Chromium	ND	0.250	mg/kg							
LCS (B5E1514-BS1)					Prepared: 05/15/2025 Analyzed: 06/03/2025					
Hexavalent Chromium	2.27	0.250	mg/kg	2.50		90.9	80-120			
Matrix Spike (B5E1514-MS1)					Source: E5E0472-04 Prepared: 05/15/2025 Analyzed: 06/03/2025					
Hexavalent Chromium	1.40	0.255	mg/kg	2.55	0.108	50.7	75-125			QM-07
Matrix Spike (B5E1514-MS2)					Source: E5E0472-04 Prepared: 05/15/2025 Analyzed: 06/03/2025					
Hexavalent Chromium	216	25.6	mg/kg	266	ND	80.9	75-125			
Matrix Spike Dup (B5E1514-MSD1)					Source: E5E0472-04 Prepared: 05/15/2025 Analyzed: 06/03/2025					QR-03
Hexavalent Chromium	2.02	0.254	mg/kg	2.54	0.108	75.1	75-125	35.8	200	
Post Spike (B5E1514-PS1)					Source: E5E0472-04 Prepared: 05/15/2025 Analyzed: 06/03/2025					
Hexavalent Chromium	50.2		ug/L	50.0	2.13	96.1	80-120			

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Classical Chemistry Parameters - Quality Control
Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5E1507 - DTPA Sorbitol Preparation

Blank (B5E1507-BLK1)

Prepared: 05/15/2025 Analyzed: 05/16/2025

Boron ND 0.100 mg/L

Duplicate (B5E1507-DUP1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/16/2025

Boron 0.511 0.100 mg/L 0.449 12.8 50

Batch B5E1509 - Saturated Paste Metals

Blank (B5E1509-BLK1)

Prepared: 05/15/2025 Analyzed: 05/16/2025

Calcium PPM ND 10.0 mg/L

SAR ND 0.0100 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

Duplicate (B5E1509-DUP1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/16/2025

SAR ND 0.0100 SAR 1.38 200

Calcium PPM 12.6 10.0 mg/L 16.1 24.5 50

Magnesium PPM 5.89 10.0 " 7.83 28.3 50

Sodium PPM 21.3 10.0 " 26.9 23.5 50

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CTEH
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Project Number: PROJ-054017
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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
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Batch B5E1523 - EPA 3580

Blank (B5E1523-BLK1)

Prepared: 05/15/2025 Analyzed: 05/15/2025

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		99.6	60-130			
Surrogate: Anthracene-d10	200		"	200		99.4	60-130			
Surrogate: Pyrene-d10	230		"	200		113	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		107	60-130			

LCS (B5E1523-BS1)

Prepared: 05/15/2025 Analyzed: 05/15/2025

1-Methylnaphthalene	0.178	0.002	mg/kg	0.200		89.2	70-130			
2-Methylnaphthalene	0.177	0.002	"	0.200		88.4	70-130			
Acenaphthene	0.199	0.020	"	0.200		99.3	70-130			
Anthracene	0.187	0.020	"	0.200		93.5	70-130			

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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
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Batch B5E1523 - EPA 3580

LCS (B5E1523-BS1)

Prepared: 05/15/2025 Analyzed: 05/15/2025

Benzo (a) anthracene	0.219	0.005	mg/kg	0.200		110	70-130			
Benzo (a) pyrene	0.220	0.020	"	0.200		110	70-130			
Benzo (b) fluoranthene	0.213	0.020	"	0.200		107	70-130			
Benzo (g,h,i) perylene	0.210	0.020	"	0.200		105	70-130			
Benzo (k) fluoranthene	0.210	0.020	"	0.200		105	70-130			
Chrysene	0.200	0.020	"	0.200		100	70-130			
Dibenz (a,h) anthracene	0.206	0.020	"	0.200		103	70-130			
Fluoranthene	0.221	0.020	"	0.200		110	70-130			
Fluorene	0.184	0.020	"	0.200		91.9	70-130			
Indeno (1,2,3-cd) pyrene	0.214	0.020	"	0.200		107	70-130			
Naphthalene	0.189	0.002	"	0.200		94.4	70-130			
Phenanthrene	0.194	0.020	"	0.200		96.9	70-130			
Pyrene	0.223	0.020	"	0.200		112	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		99.3	60-130			
Surrogate: Anthracene-d10	200		"	200		100	60-130			
Surrogate: Pyrene-d10	220		"	200		112	60-130			
Surrogate: Benzo (a) pyrene-d12	220		"	200		108	60-130			

Matrix Spike (B5E1523-MS1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/15/2025

1-Methylnaphthalene	0.188	0.002	mg/kg	0.200	0.0008	93.6	70-130			
2-Methylnaphthalene	0.183	0.002	"	0.200	ND	91.7	70-130			
Acenaphthene	0.203	0.020	"	0.200	0.001	101	70-130			
Anthracene	0.200	0.020	"	0.200	0.0009	99.5	70-130			
Benzo (a) anthracene	0.225	0.005	"	0.200	0.0009	112	70-130			
Benzo (a) pyrene	0.230	0.020	"	0.200	0.0008	115	70-130			
Benzo (b) fluoranthene	0.225	0.020	"	0.200	0.001	112	70-130			
Benzo (g,h,i) perylene	0.220	0.020	"	0.200	0.001	110	70-130			

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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
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Batch B5E1523 - EPA 3580

Matrix Spike (B5E1523-MS1)				Source: E5E0472-04		Prepared: 05/15/2025 Analyzed: 05/15/2025				
Benzo (k) fluoranthene	0.224	0.020	mg/kg	0.200	ND	112	70-130			
Chrysene	0.210	0.020	"	0.200	0.001	104	70-130			
Dibenz (a,h) anthracene	0.216	0.020	"	0.200	0.0003	108	70-130			
Fluoranthene	0.228	0.020	"	0.200	0.002	113	70-130			
Fluorene	0.190	0.020	"	0.200	0.0004	94.8	70-130			
Indeno (1,2,3-cd) pyrene	0.207	0.020	"	0.200	0.001	103	70-130			
Naphthalene	0.196	0.002	"	0.200	ND	97.8	70-130			
Phenanthrene	0.200	0.020	"	0.200	ND	100	70-130			
Pyrene	0.230	0.020	"	0.200	0.001	114	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		99.3	60-130			
Surrogate: Anthracene-d10	200		"	200		99.8	60-130			
Surrogate: Pyrene-d10	220		"	200		110	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		107	60-130			

Matrix Spike Dup (B5E1523-MSD1)				Source: E5E0472-04		Prepared: 05/15/2025 Analyzed: 05/15/2025				
1-Methylnaphthalene	0.189	0.002	mg/kg	0.200	0.0008	94.0	70-130	0.470	20	
2-Methylnaphthalene	0.184	0.002	"	0.200	ND	91.8	70-130	0.215	20	
Acenaphthene	0.200	0.020	"	0.200	0.001	99.3	70-130	1.62	20	
Anthracene	0.193	0.020	"	0.200	0.0009	96.0	70-130	3.56	20	
Benzo (a) anthracene	0.228	0.005	"	0.200	0.0009	114	70-130	1.26	20	
Benzo (a) pyrene	0.229	0.020	"	0.200	0.0008	114	70-130	0.748	20	
Benzo (b) fluoranthene	0.226	0.020	"	0.200	0.001	112	70-130	0.530	20	
Benzo (g,h,i) perylene	0.222	0.020	"	0.200	0.001	111	70-130	0.804	20	
Benzo (k) fluoranthene	0.224	0.020	"	0.200	ND	112	70-130	0.303	20	
Chrysene	0.212	0.020	"	0.200	0.001	105	70-130	0.877	20	
Dibenz (a,h) anthracene	0.218	0.020	"	0.200	0.0003	109	70-130	1.18	20	
Fluoranthene	0.228	0.020	"	0.200	0.002	113	70-130	0.255	20	

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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
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Batch B5E1523 - EPA 3580

Matrix Spike Dup (B5E1523-MSD1)			Source: E5E0472-04			Prepared: 05/15/2025 Analyzed: 05/15/2025				
Fluorene	0.190	0.020	mg/kg	0.200	0.0004	94.8	70-130	0.0621	20	
Indeno (1,2,3-cd) pyrene	0.227	0.020	"	0.200	0.001	113	70-130	8.99	20	
Naphthalene	0.191	0.002	"	0.200	ND	95.7	70-130	2.25	20	
Phenanthrene	0.202	0.020	"	0.200	ND	101	70-130	0.707	20	
Pyrene	0.229	0.020	"	0.200	0.001	114	70-130	0.639	20	
Surrogate: Fluorene-d10	200		ug/kg	200		98.8	60-130			
Surrogate: Anthracene-d10	200		"	200		99.6	60-130			
Surrogate: Pyrene-d10	220		"	200		110	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		106	60-130			

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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 B5E1501 - EPA 3550B										
Blank (B5E1501-BLK1)										
					Prepared: 05/15/2025 Analyzed: 05/15/2025					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	25		"	24.9		101	50-150			
LCS (B5E1501-BS1)										
					Prepared: 05/15/2025 Analyzed: 05/15/2025					
Diesel (C10-C28)	966	50.0	mg/kg	1000		96.6	70-130			
Residual Range Organics (C28-C40)	1180	200	"	1000		118	70-130			
Surrogate: o-Terphenyl	54		"	49.8		109	50-150			
Matrix Spike (B5E1501-MS1)										
			Source: E5E0472-04		Prepared: 05/15/2025 Analyzed: 05/15/2025					
Diesel (C10-C28)	1060	50.0	mg/kg	1000	ND	106	70-130			
Residual Range Organics (C28-C40)	1340	200	"	1000	ND	134	70-130			QM-07
Surrogate: o-Terphenyl	55		"	49.8		110	50-150			
Matrix Spike (B5E1501-MS2)										
			Source: E5E0480-01		Prepared: 05/15/2025 Analyzed: 05/15/2025					
Diesel (C10-C28)	988	50.0	mg/kg	1000	ND	98.8	70-130			
Residual Range Organics (C28-C40)	1230	200	"	1000	ND	123	70-130			
Surrogate: o-Terphenyl	49		"	49.8		97.9	50-150			
Matrix Spike Dup (B5E1501-MSD1)										
			Source: E5E0472-04		Prepared: 05/15/2025 Analyzed: 05/15/2025					
Diesel (C10-C28)	1050	50.0	mg/kg	1000	ND	105	70-130	0.180	35	
Residual Range Organics (C28-C40)	1340	200	"	1000	ND	134	70-130	0.0929	35	QM-07
Surrogate: o-Terphenyl	52		"	49.8		104	50-150			
Matrix Spike Dup (B5E1501-MSD2)										
			Source: E5E0480-01		Prepared: 05/15/2025 Analyzed: 05/15/2025					
Diesel (C10-C28)	941	50.0	mg/kg	1000	ND	94.1	70-130	4.87	35	
Residual Range Organics (C28-C40)	1200	200	"	1000	ND	120	70-130	3.19	35	
Surrogate: o-Terphenyl	42		"	49.8		84.3	50-150			

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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
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Batch B5E1501 - EPA 3550B

Matrix Spike Dup (B5E1501-MSD2)

Source: E5E0480-01

Prepared: 05/15/2025 Analyzed: 05/15/2025

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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
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Batch B5E1526 - EPA 3050B

Blank (B5E1526-BLK1)

Prepared: 05/15/2025 Analyzed: 05/16/2025

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

LCS (B5E1526-BS1)

Prepared: 05/15/2025 Analyzed: 05/16/2025

Arsenic	5.13	0.290	mg/kg	5.00	103	80-120
Barium	500	82.0	"	500	100	80-120
Cadmium	5.33	0.380	"	5.00	107	80-120
Copper	53.1	46.0	"	50.0	106	80-120
Lead	5.08	14.0	"	5.00	102	80-120
Nickel	5.26	26.0	"	5.00	105	80-120
Selenium	5.55	0.260	"	5.00	111	80-120
Silver	5.22	0.800	"	5.00	104	80-120
Zinc	50.7	370	"	50.0	101	80-120

Matrix Spike (B5E1526-MS1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/16/2025

Arsenic	15.9	0.247	mg/kg	4.25	5.93	235	75-125	QM-07
Barium	511	69.7	"	425	68.1	104	75-125	
Cadmium	4.94	0.323	"	4.25	0.224	111	75-125	
Copper	56.4	39.1	"	42.5	9.75	110	75-125	
Lead	13.8	11.9	"	4.25	9.20	108	75-125	

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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
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Batch B5E1526 - EPA 3050B

Matrix Spike (B5E1526-MS1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/16/2025

Nickel	14.2	22.1	mg/kg	4.25	8.44	135	75-125			QM-07
Selenium	5.21	0.221	"	4.25	0.489	111	75-125			
Silver	4.60	0.680	"	4.25	0.0187	108	75-125			
Zinc	88.5	315	"	42.5	39.2	116	75-125			

Matrix Spike Dup (B5E1526-MSD1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/16/2025

Arsenic	8.99	0.248	mg/kg	4.27	5.93	71.7	75-125	55.5	20	QM-07, QR-DUP
Barium	484	70.0	"	427	68.1	97.5	75-125	5.39	20	
Cadmium	4.71	0.324	"	4.27	0.224	105	75-125	4.71	20	
Copper	53.2	39.3	"	42.7	9.75	102	75-125	5.95	20	
Lead	12.5	12.0	"	4.27	9.20	78.0	75-125	9.47	20	
Nickel	11.6	22.2	"	4.27	8.44	73.0	75-125	20.4	20	QM-07, QR-DUP
Selenium	4.65	0.222	"	4.27	0.489	97.6	75-125	11.2	20	
Silver	4.32	0.683	"	4.27	0.0187	101	75-125	6.39	20	
Zinc	75.7	316	"	42.7	39.2	85.6	75-125	15.6	20	

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Jordan A. Bynon, Project Manager



CTEH
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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
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Batch B5E1515 - Saturated Paste pH/EC

Blank (B5E1515-BLK1)

Prepared: 05/15/2025 Analyzed: 05/16/2025

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B5E1515-DUP1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/16/2025

pH	7.21		pH Units	7.15		0.836	25
Specific Conductance (EC)	0.246	0.00500	mmhos/cm	0.247		0.406	25

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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
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Batch B5E1472 - EPA 5030 (soil)

Blank (B5E1472-BLK1)

Prepared: 05/15/2025 Analyzed: 05/15/2025

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		103	70-130
Surrogate: Toluene-d8	0.13		"	0.125		103	70-130
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		96.5	70-130

LCS (B5E1472-BS1)

Prepared: 05/15/2025 Analyzed: 05/15/2025

1,2,4-Trimethylbenzene	0.0919	0.00200	mg/kg	0.100		91.9	70-130
1,3,5-Trimethylbenzene	0.0939	0.00200	"	0.100		93.9	70-130
Benzene	0.0932	0.00200	"	0.100		93.2	70-130
Ethylbenzene	0.0950	0.00200	"	0.100		95.0	70-130
Naphthalene	0.0932	0.00380	"	0.100		93.2	70-130
Toluene	0.0902	0.00200	"	0.100		90.2	70-130
o-Xylene	0.0944	0.00200	"	0.100		94.4	70-130
m,p-Xylene	0.182	0.00400	"	0.200		91.0	70-130

Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		101	70-130
Surrogate: Toluene-d8	0.13		"	0.125		100	70-130
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		100	70-130

Matrix Spike (B5E1472-MS1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/15/2025

1,2,4-Trimethylbenzene	0.111	0.00200	mg/kg	0.100	ND	111	70-130
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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
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Batch B5E1472 - EPA 5030 (soil)

Matrix Spike (B5E1472-MS1)				Source: E5E0472-04		Prepared: 05/15/2025 Analyzed: 05/15/2025				
1,3,5-Trimethylbenzene	0.113	0.00200	mg/kg	0.100	ND	113	70-130			
Benzene	0.111	0.00200	"	0.100	0.000640	110	70-130			
Ethylbenzene	0.113	0.00200	"	0.100	ND	113	70-130			
Naphthalene	0.119	0.00380	"	0.100	ND	119	70-130			
Toluene	0.108	0.00200	"	0.100	ND	108	70-130			
o-Xylene	0.113	0.00200	"	0.100	ND	113	70-130			
m,p-Xylene	0.221	0.00400	"	0.200	ND	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		107	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.6	70-130			

Matrix Spike (B5E1472-MS2)				Source: E5E0480-01		Prepared: 05/15/2025 Analyzed: 05/15/2025				
1,2,4-Trimethylbenzene	0.0904	0.00200	mg/kg	0.100	ND	90.4	70-130			
1,3,5-Trimethylbenzene	0.0916	0.00200	"	0.100	ND	91.6	70-130			
Benzene	0.101	0.00200	"	0.100	ND	101	70-130			
Ethylbenzene	0.0924	0.00200	"	0.100	ND	92.4	70-130			
Naphthalene	0.0908	0.00380	"	0.100	ND	90.8	70-130			
Toluene	0.0909	0.00200	"	0.100	ND	90.9	70-130			
o-Xylene	0.0930	0.00200	"	0.100	ND	93.0	70-130			
m,p-Xylene	0.181	0.00400	"	0.200	ND	90.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		111	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.2	70-130			

Matrix Spike Dup (B5E1472-MSD1)				Source: E5E0472-04		Prepared: 05/15/2025 Analyzed: 05/15/2025				
1,2,4-Trimethylbenzene	0.0963	0.00200	mg/kg	0.100	ND	96.3	70-130	13.8	20	
1,3,5-Trimethylbenzene	0.0996	0.00200	"	0.100	ND	99.6	70-130	12.8	20	

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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
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Batch B5E1472 - EPA 5030 (soil)

Matrix Spike Dup (B5E1472-MSD1)

Source: E5E0472-04

Prepared: 05/15/2025 Analyzed: 05/15/2025

Benzene	0.0973	0.00200	mg/kg	0.100	0.000640	96.7	70-130	12.9	20	
Ethylbenzene	0.0982	0.00200	"	0.100	ND	98.2	70-130	14.0	20	
Naphthalene	0.0941	0.00380	"	0.100	ND	94.1	70-130	23.6	20	QR-02
Toluene	0.0948	0.00200	"	0.100	ND	94.8	70-130	12.9	20	
o-Xylene	0.101	0.00200	"	0.100	ND	101	70-130	11.6	20	
m,p-Xylene	0.191	0.00400	"	0.200	ND	95.7	70-130	14.3	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		100	70-130			

Matrix Spike Dup (B5E1472-MSD2)

Source: E5E0480-01

Prepared: 05/15/2025 Analyzed: 05/15/2025

1,2,4-Trimethylbenzene	0.0842	0.00200	mg/kg	0.100	ND	84.2	70-130	7.10	20	
1,3,5-Trimethylbenzene	0.0861	0.00200	"	0.100	ND	86.1	70-130	6.19	20	
Benzene	0.0918	0.00200	"	0.100	ND	91.8	70-130	9.62	20	
Ethylbenzene	0.0864	0.00200	"	0.100	ND	86.4	70-130	6.69	20	
Naphthalene	0.0853	0.00380	"	0.100	ND	85.3	70-130	6.24	20	
Toluene	0.0854	0.00200	"	0.100	ND	85.4	70-130	6.26	20	
o-Xylene	0.0877	0.00200	"	0.100	ND	87.7	70-130	5.91	20	
m,p-Xylene	0.168	0.00400	"	0.200	ND	84.1	70-130	7.10	20	
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		115	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.4	70-130			

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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.

QR-DUP RPD exceeds QC acceptance criteria, this indicates source sample is not homogenous.

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-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.

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Jordan A. Bynon, Project Manager