



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 25, 2025. This project is associated with Origins project number E5E0888-01.

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



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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
GACO0523T175-2S001	E5E0888-01	Soil	May 23, 2025 10:45	05/25/2025 08:00

Origins Laboratory
Bynon

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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: E5E0888 Client: cteh
 Client Project ID: PROJ-054017
 Checklist Completed by: JAB/Bem Shipped Via: HD
 Date/time completed: 5/25/25 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Airbill #: N/A
 Matrix(s) Received: (Check all that apply): 2 Soil/Solid Water Other:
 Cooler Number/Temperature: 1 12.4 °C
 Thermometer ID: T007

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 subcontrated analytes 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 in the additional comments (above) and the case narrative.

S.H.O. Reviewed by (Project Manager) S. B. 1/25 Date/Time Reviewed

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GACO0523T175-2S001
5/23/2025 10:45:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5E0888-01 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	2.02		0.100	mg/L	1	B5E2735	05/27/2025	05/28/2025	
DRO/ORO by EPA 8015D									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5E2708	05/27/2025	05/27/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	77.3 %			50-150		"	"	"	
GBTEX+TMBs by 8260D									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5E2701	05/27/2025	05/27/2025	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	122 %			70-130		"	"	"	
Surrogate: Toluene-d8	99.3 %			70-130		"	"	"	
Surrogate: 4-Bromofluorobenzene	108 %			70-130		"	"	"	

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GACO0523T175-2S001
5/23/2025 10:45:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5E0888-01 (Soil)
Origins Laboratory

Metals by Saturated Paste by EPA 6010

Calcium	4.62		0.499	meq/L	10	[CALC]	05/27/2025	05/30/2025	
Magnesium	3.30		0.823	"	"	"	"	"	
Sodium	6.36		0.435	"	"	"	"	"	

PAH by EPA 8270E extracted via 3580A

1-Methylnaphthalene	ND		0.002	mg/kg	1	B5E2764	05/27/2025	05/28/2025	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

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GACO0523T175-2S001
5/23/2025 10:45:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5E0888-01 (Soil)
Origins Laboratory

PAH by EPA 8270E extracted via 3580A

Surrogate: Fluorene-d10	98.1 %			60-130		B5E2764	05/27/2025	05/28/2025	
Surrogate: Anthracene-d10	98.3 %			60-130		"	"	"	
Surrogate: Pyrene-d10	93.2 %			60-130		"	"	"	
Surrogate: Benzo (a) pyrene-d12	98.7 %			60-130		"	"	"	

pH in Soil by 9045D

pH	7.53			pH Units	1	B5E2750	05/27/2025	05/29/2025	
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SAR by 20B Saturated Paste

SAR	3.20		0.0100	SAR	1	B5E2725	05/27/2025	05/30/2025	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.48		0.00500	mmhos/cm	1	B5E2750	05/27/2025	05/29/2025	
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Table 915 metals by EPA 6020B

Arsenic	5.38		0.268	mg/kg	10	B5E2758	05/27/2025	05/27/2025	
Barium	130		75.8	"	"	"	"	"	
Cadmium	0.520		0.351	"	"	"	"	"	
Copper	ND		42.5	"	"	"	"	"	
Lead	77.8		12.9	"	"	"	"	"	
Nickel	ND		24.0	"	"	"	"	"	

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GACO0523T175-2S001
5/23/2025 10:45:00AM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5E0888-01 (Soil)									
Origins Laboratory									
Table 915 metals by EPA 6020B									
Selenium	0.462		0.240	mg/kg	10	B5E2758	05/27/2025	05/27/2025	
Silver	ND		0.739	"	"	"	"	"	
Zinc	ND		342	"	"	"	"	"	

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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 B5E2725 - Saturated Paste Metals

Blank (B5E2725-BLK1)

Prepared: 05/27/2025 Analyzed: 05/30/2025

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 (B5E2725-DUP1)

Source: E5E0884-07

Prepared: 05/27/2025 Analyzed: 05/30/2025

SAR	ND	0.0100	SAR	0.0697				200		
Calcium PPM	35.1	10.0	mg/L	39.2				11.1	50	
Magnesium PPM	10.4	10.0	"	11.5				10.3	50	
Sodium PPM	1.88	10.0	"	1.93				2.62	50	

Batch B5E2735 - DTPA Sorbitol Preparation

Blank (B5E2735-BLK1)

Prepared: 05/27/2025 Analyzed: 05/28/2025

Boron	ND	0.100	mg/L							
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Duplicate (B5E2735-DUP1)

Source: E5E0882-22

Prepared: 05/27/2025 Analyzed: 05/28/2025

Boron	1.42	0.101	mg/L	1.28				10.6	50	
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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 B5E2764 - EPA 3580

Blank (B5E2764-BLK1)

Prepared: 05/27/2025 Analyzed: 05/28/2025

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		99.1	60-130			
Surrogate: Anthracene-d10	200		"	200		98.9	60-130			
Surrogate: Pyrene-d10	210		"	200		104	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		95.0	60-130			

LCS (B5E2764-BS1)

Prepared: 05/27/2025 Analyzed: 05/28/2025

1-Methylnaphthalene	0.220	0.002	mg/kg	0.200		110	70-130			
2-Methylnaphthalene	0.217	0.002	"	0.200		109	70-130			
Acenaphthene	0.222	0.020	"	0.200		111	70-130			
Anthracene	0.218	0.020	"	0.200		109	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 B5E2764 - EPA 3580

LCS (B5E2764-BS1)

Prepared: 05/27/2025 Analyzed: 05/28/2025

Benzo (a) anthracene	0.222	0.005	mg/kg	0.200		111	70-130			
Benzo (a) pyrene	0.196	0.020	"	0.200		98.2	70-130			
Benzo (b) fluoranthene	0.203	0.020	"	0.200		102	70-130			
Benzo (g,h,i) perylene	0.198	0.020	"	0.200		99.1	70-130			
Benzo (k) fluoranthene	0.196	0.020	"	0.200		98.2	70-130			
Chrysene	0.239	0.020	"	0.200		120	70-130			
Dibenz (a,h) anthracene	0.201	0.020	"	0.200		100	70-130			
Fluoranthene	0.234	0.020	"	0.200		117	70-130			
Fluorene	0.223	0.020	"	0.200		111	70-130			
Indeno (1,2,3-cd) pyrene	0.194	0.020	"	0.200		97.1	70-130			
Naphthalene	0.223	0.002	"	0.200		112	70-130			
Phenanthrene	0.214	0.020	"	0.200		107	70-130			
Pyrene	0.231	0.020	"	0.200		116	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		99.1	60-130			
Surrogate: Anthracene-d10	200		"	200		99.0	60-130			
Surrogate: Pyrene-d10	210		"	200		103	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		94.9	60-130			

Matrix Spike (B5E2764-MS1)

Source: E5E0900-12

Prepared: 05/27/2025 Analyzed: 05/28/2025

1-Methylnaphthalene	0.208	0.002	mg/kg	0.200	0.002	103	70-130			
2-Methylnaphthalene	0.211	0.002	"	0.200	0.002	104	70-130			
Acenaphthene	0.215	0.020	"	0.200	0.0005	107	70-130			
Anthracene	0.213	0.020	"	0.200	0.002	106	70-130			
Benzo (a) anthracene	0.243	0.005	"	0.200	0.009	117	70-130			
Benzo (a) pyrene	0.215	0.020	"	0.200	0.010	102	70-130			
Benzo (b) fluoranthene	0.210	0.020	"	0.200	0.015	97.7	70-130			
Benzo (g,h,i) perylene	0.214	0.020	"	0.200	0.011	102	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 B5E2764 - EPA 3580

Matrix Spike (B5E2764-MS1)

Source: E5E0900-12

Prepared: 05/27/2025 Analyzed: 05/28/2025

Benzo (k) fluoranthene	0.231	0.020	mg/kg	0.200	0.007	112	70-130			
Chrysene	0.258	0.020	"	0.200	0.016	121	70-130			
Dibenz (a,h) anthracene	0.195	0.020	"	0.200	0.002	96.3	70-130			
Fluoranthene	0.242	0.020	"	0.200	0.013	114	70-130			
Fluorene	0.206	0.020	"	0.200	ND	103	70-130			
Indeno (1,2,3-cd) pyrene	0.208	0.020	"	0.200	0.009	99.5	70-130			
Naphthalene	0.220	0.002	"	0.200	0.001	109	70-130			
Phenanthrene	0.211	0.020	"	0.200	ND	106	70-130			
Pyrene	0.238	0.020	"	0.200	0.012	113	70-130			
Surrogate: Fluorene-d10	190		ug/kg	200		94.2	60-130			
Surrogate: Anthracene-d10	190		"	200		96.6	60-130			
Surrogate: Pyrene-d10	200		"	200		99.0	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		94.6	60-130			

Matrix Spike Dup (B5E2764-MSD1)

Source: E5E0900-12

Prepared: 05/27/2025 Analyzed: 05/28/2025

1-Methylnaphthalene	0.217	0.002	mg/kg	0.200	0.002	107	70-130	3.80	20	
2-Methylnaphthalene	0.218	0.002	"	0.200	0.002	108	70-130	3.29	20	
Acenaphthene	0.214	0.020	"	0.200	0.0005	107	70-130	0.478	20	
Anthracene	0.216	0.020	"	0.200	0.002	107	70-130	1.23	20	
Benzo (a) anthracene	0.239	0.005	"	0.200	0.009	115	70-130	1.56	20	
Benzo (a) pyrene	0.217	0.020	"	0.200	0.010	103	70-130	0.793	20	
Benzo (b) fluoranthene	0.224	0.020	"	0.200	0.015	104	70-130	6.11	20	
Benzo (g,h,i) perylene	0.211	0.020	"	0.200	0.011	100	70-130	1.19	20	
Benzo (k) fluoranthene	0.228	0.020	"	0.200	0.007	110	70-130	1.60	20	
Chrysene	0.258	0.020	"	0.200	0.016	121	70-130	0.0886	20	
Dibenz (a,h) anthracene	0.194	0.020	"	0.200	0.002	95.8	70-130	0.550	20	
Fluoranthene	0.239	0.020	"	0.200	0.013	113	70-130	1.54	20	

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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 B5E2764 - EPA 3580

Matrix Spike Dup (B5E2764-MSD1)

Source: E5E0900-12

Prepared: 05/27/2025 Analyzed: 05/28/2025

Fluorene	0.215	0.020	mg/kg	0.200	ND	107	70-130	3.93	20	
Indeno (1,2,3-cd) pyrene	0.205	0.020	"	0.200	0.009	97.9	70-130	1.54	20	
Naphthalene	0.219	0.002	"	0.200	0.001	109	70-130	0.185	20	
Phenanthrene	0.213	0.020	"	0.200	ND	107	70-130	0.940	20	
Pyrene	0.240	0.020	"	0.200	0.012	114	70-130	0.759	20	
Surrogate: Fluorene-d10	200		ug/kg	200		97.9	60-130			
Surrogate: Anthracene-d10	200		"	200		99.6	60-130			
Surrogate: Pyrene-d10	200		"	200		99.2	60-130			
Surrogate: Benzo (a) pyrene-d12	190		"	200		95.6	60-130			

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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 B5E2708 - EPA 3550B										
Blank (B5E2708-BLK1)										
					Prepared: 05/27/2025 Analyzed: 05/27/2025					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	20		"	24.9		80.4	50-150			
LCS (B5E2708-BS1)										
					Prepared: 05/27/2025 Analyzed: 05/27/2025					
Diesel (C10-C28)	1020	50.0	mg/kg	1000		102	70-130			
Residual Range Organics (C28-C40)	1080	200	"	1000		108	70-130			
Surrogate: o-Terphenyl	48		"	49.8		96.9	50-150			
Matrix Spike (B5E2708-MS1)										
			Source: E5E0878-04			Prepared: 05/27/2025 Analyzed: 05/27/2025				
Diesel (C10-C28)	954	50.0	mg/kg	1000	ND	95.4	70-130			
Residual Range Organics (C28-C40)	1030	200	"	1000	ND	103	70-130			
Surrogate: o-Terphenyl	43		"	49.8		87.0	50-150			
Matrix Spike Dup (B5E2708-MSD1)										
			Source: E5E0878-04			Prepared: 05/27/2025 Analyzed: 05/27/2025				
Diesel (C10-C28)	962	50.0	mg/kg	1000	ND	96.2	70-130	0.842	35	
Residual Range Organics (C28-C40)	1050	200	"	1000	ND	105	70-130	2.08	35	
Surrogate: o-Terphenyl	46		"	49.8		93.0	50-150			

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 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
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5E2758 - EPA 3050B

Blank (B5E2758-BLK1)

Prepared: 05/27/2025 Analyzed: 05/27/2025

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 (B5E2758-BS1)

Prepared: 05/27/2025 Analyzed: 05/27/2025

Arsenic	5.87	0.290	mg/kg	5.00		117	80-120			
Barium	584	82.0	"	500		117	80-120			
Cadmium	5.92	0.380	"	5.00		118	80-120			
Copper	56.4	46.0	"	50.0		113	80-120			
Lead	5.81	14.0	"	5.00		116	80-120			
Nickel	5.72	26.0	"	5.00		114	80-120			
Selenium	5.91	0.260	"	5.00		118	80-120			
Silver	6.01	0.800	"	5.00		120	80-120			
Zinc	58.3	370	"	50.0		117	80-120			

Matrix Spike (B5E2758-MS1)

Source: E5E0878-04

Prepared: 05/27/2025 Analyzed: 05/27/2025

Arsenic	11.4	0.259	mg/kg	4.46	7.13	96.2	75-125			
Barium	547	73.1	"	446	88.2	103	75-125			
Cadmium	4.74	0.339	"	4.46	0.168	102	75-125			
Copper	55.0	41.0	"	44.6	9.04	103	75-125			
Lead	13.5	12.5	"	4.46	10.2	72.9	75-125			QM-07

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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 B5E2758 - EPA 3050B

Matrix Spike (B5E2758-MS1)

Source: E5E0878-04

Prepared: 05/27/2025 Analyzed: 05/27/2025

Nickel	13.8	23.2	mg/kg	4.46	9.22	103	75-125			
Selenium	4.87	0.232	"	4.46	0.445	99.3	75-125			
Silver	4.62	0.713	"	4.46	0.0395	103	75-125			
Zinc	92.4	330	"	44.6	48.3	98.9	75-125			

Matrix Spike Dup (B5E2758-MSD1)

Source: E5E0878-04

Prepared: 05/27/2025 Analyzed: 05/27/2025

Arsenic	13.6	0.281	mg/kg	4.85	7.13	134	75-125	17.5	20	QM-07
Barium	597	79.5	"	485	88.2	105	75-125	8.72	20	
Cadmium	5.32	0.368	"	4.85	0.168	106	75-125	11.7	20	
Copper	61.7	44.6	"	48.5	9.04	109	75-125	11.6	20	
Lead	14.8	13.6	"	4.85	10.2	94.1	75-125	9.28	20	
Nickel	14.9	25.2	"	4.85	9.22	118	75-125	7.72	20	
Selenium	5.63	0.252	"	4.85	0.445	107	75-125	14.5	20	
Silver	5.22	0.776	"	4.85	0.0395	107	75-125	12.2	20	
Zinc	99.7	359	"	48.5	48.3	106	75-125	7.60	20	

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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 B5E2750 - Saturated Paste pH/EC

Blank (B5E2750-BLK1)

Prepared: 05/27/2025 Analyzed: 05/29/2025

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B5E2750-DUP1)

Source: E5E0884-07

Prepared: 05/27/2025 Analyzed: 05/29/2025

Specific Conductance (EC) 0.412 0.00500 mmhos/cm 0.440 6.55 25

pH 7.76 pH Units 7.71 0.646 25

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 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 B5E2701 - EPA 5030 (soil)

Prepared: 05/27/2025 Analyzed: 05/27/2025

Blank (B5E2701-BLK1)

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		101	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

LCS (B5E2701-BS1)

Prepared: 05/27/2025 Analyzed: 05/27/2025

1,2,4-Trimethylbenzene	0.103	0.00200	mg/kg	0.100		103	70-130			
1,3,5-Trimethylbenzene	0.103	0.00200	"	0.100		103	70-130			
Benzene	0.0870	0.00200	"	0.100		87.0	70-130			
Ethylbenzene	0.0923	0.00200	"	0.100		92.3	70-130			
Naphthalene	0.0815	0.00380	"	0.100		81.5	70-130			
Toluene	0.0862	0.00200	"	0.100		86.2	70-130			
o-Xylene	0.0973	0.00200	"	0.100		97.3	70-130			
m,p-Xylene	0.190	0.00400	"	0.200		94.8	70-130			

Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		99.5	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.7	70-130			

Matrix Spike (B5E2701-MS1)

Source: E5E0878-04

Prepared: 05/27/2025 Analyzed: 05/27/2025

1,2,4-Trimethylbenzene	0.120	0.00200	mg/kg	0.100	ND	120	70-130			
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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 B5E2701 - EPA 5030 (soil)

Matrix Spike (B5E2701-MS1)

Source: E5E0878-04

Prepared: 05/27/2025 Analyzed: 05/27/2025

1,3,5-Trimethylbenzene	0.122	0.00200	mg/kg	0.100	ND	122	70-130			
Benzene	0.0987	0.00200	"	0.100	ND	98.7	70-130			
Ethylbenzene	0.108	0.00200	"	0.100	ND	108	70-130			
Naphthalene	0.0965	0.00380	"	0.100	ND	96.5	70-130			
Toluene	0.102	0.00200	"	0.100	ND	102	70-130			
o-Xylene	0.119	0.00200	"	0.100	ND	119	70-130			
m,p-Xylene	0.223	0.00400	"	0.200	ND	112	70-130			

Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		108	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.7	70-130			

Matrix Spike Dup (B5E2701-MSD1)

Source: E5E0878-04

Prepared: 05/27/2025 Analyzed: 05/27/2025

1,2,4-Trimethylbenzene	0.0988	0.00200	mg/kg	0.100	ND	98.8	70-130	19.1	20	
1,3,5-Trimethylbenzene	0.0991	0.00200	"	0.100	ND	99.1	70-130	20.3	20	QR-02
Benzene	0.0897	0.00200	"	0.100	ND	89.7	70-130	9.55	20	
Ethylbenzene	0.0972	0.00200	"	0.100	ND	97.2	70-130	10.6	20	
Naphthalene	0.0824	0.00380	"	0.100	ND	82.4	70-130	15.8	20	
Toluene	0.0887	0.00200	"	0.100	ND	88.7	70-130	13.6	20	
o-Xylene	0.104	0.00200	"	0.100	ND	104	70-130	13.4	20	
m,p-Xylene	0.199	0.00400	"	0.200	ND	99.6	70-130	11.5	20	

Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		105	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		104	70-130			

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Notes and Definitions

- U Sample is Non-Detect.
 - 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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