



Ensolum

May 14, 2025

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

**Project Name - KMG - Herman L 32-14 Wellhead      Project Number - 09A14171096**

Attached are your analytical results for KMG - Herman L 32-14 Wellhead received by Origins Laboratory April 25, 2025. This project is associated with Origins project number E5D0754-01.

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



Ensolum  
 11049 W 44th Avenue, Suite 103  
 Wheat Ridge CO 80033

Jeremy Espinoza  
 Project Number: 09A14171096  
 Project: KMG - Herman L 32-14 Wellhead

### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL05(32-14)@3'	E5D0754-01	Soil	April 25, 2025 15:09	04/25/2025 16:45
FL05(32-14)@3'-V	E5D0754-02	Soil	April 25, 2025 15:09	04/25/2025 16:45
GW-FL05(32-14)@2.5'	E5D0754-03	Water	April 25, 2025 14:40	04/25/2025 16:45
FL06(32-14)@3'	E5D0754-04	Soil	April 25, 2025 14:57	04/25/2025 16:45
FL06(32-14)@3'-V	E5D0754-05	Soil	April 25, 2025 14:57	04/25/2025 16:45
GW-FL06(32-14)@2.5'	E5D0754-06	Water	April 25, 2025 14:45	04/25/2025 16:45

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# ORIGINS LABORATORY

Ensolum  
11049 W 44th Avenue, Suite 103  
Wheat Ridge CO 80033

Jeremy Espinoza  
Project Number: 09A14171096  
Project: KMG - Herman L 32-14 Wellhead

**ORIGINS**  
LABORATORY

**CURRY**

Page 1 of 1

Client: Ensolum  
Address: \_\_\_\_\_

Project Manager: J. Espinoza  
Project Name: Herman L 32-14 Wellhead  
Project Number: 09A14171096

Telephone Number: \_\_\_\_\_  
Email Address: KMG Team

Collected By: Elizabeth Z.  
Invoice/Billing Info: Initial  
SW-Surface Water  
WW-Waste Water  
I-Elutriid

SS=Soil | SWS=Soil | W=Oil | A=Air | E=Gas | LW=Leachate | HC=Hydrochloric | HNO3=Nitric | H2SO4=Sulfuric | NaOH=Sodium Hydroxide

Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix Preservative	Analysis			Comments
					+	-	±	
AL05(32-14)03	4/25/25	1504	3 S	UNP	X			Placer/Pondle
PL05(32-14)03-V		1504	3 S		X			Partial Report
PL05(32-14)03-S		1440	4 GW		X			When Available
PL06(32-14)03		1457	3 S		X			
PL06(32-14)03-V		1457	3 S		X			
PL06(32-14)03-S		1445	4 GW		X			

Temp Received: 17°C  
Received On Ice?  Yes  No

Turnaround Time  
 48 Hr  72 Hr  
 SAME DAY  24 Hr

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Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: ESD0754

Client: Ensolum

Client Project ID: Herman L32-14 WH

Checklist Completed by: JHB/NKM

Shipped Via: HD  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 4/27/25

Airbill #: N/A

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water Other: \_\_\_\_\_

Cooler Number/Temperature: 1 / 1.7 °C (Describe)

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 <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? If yes, contact client and note in narrative.		<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 analyses in order to insure sample integrity)(pH <= 2 for samples preserved with HNO3, HCL, H2SO4) / (pH >= 10 for samples preserved with NaAcO2+NaOH, ZnAc+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 taken in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) AJ

Date/Time Reviewed 4/29/25

Origins Laboratory

*EHO*

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 Project Number: 09A14171096  
 Project: KMG - Herman L 32-14 Wellhead

**FL05(32-14)@3'**  
**4/25/2025 3:09:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0754-01 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	1.37		0.102	mg/L	1	B5D2860	04/28/2025	05/02/2025	
<b>DRO/ORO by EPA 8015D</b>									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5D2923	04/29/2025	04/30/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	76.6 %			50-150		"	"	"	
<b>GBTEX+TMBs by 8260D</b>									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5D2917	04/29/2025	04/29/2025	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	103 %			70-130		"	"	"	
Surrogate: Toluene-d8	98.2 %			70-130		"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %			70-130		"	"	"	

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**FL05(32-14)@3'  
4/25/2025 3:09:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**E5D0754-01 (Soil)  
Origins Laboratory**

**Metals by Saturated Paste by EPA 6010**

Calcium	0.943		0.499	meq/L	10	[CALC]	05/01/2025	05/05/2025	
Magnesium	0.889		0.823	"	"	"	"	"	
Sodium	20.0		0.435	"	"	"	"	"	

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

1-Methylnaphthalene	ND		0.002	mg/kg	1	B5D2930	04/29/2025	05/06/2025	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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**4/25/2025 3:09:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**E5D0754-01 (Soil)**  
**Origins Laboratory**

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

Surrogate: Fluorene-d10	96.0 %			60-130		B5D2930	04/29/2025	05/06/2025	
Surrogate: Anthracene-d10	98.5 %			60-130		"	"	"	
Surrogate: Pyrene-d10	110 %			60-130		"	"	"	
Surrogate: Benzo (a) pyrene-d12	99.9 %			60-130		"	"	"	

**pH in Soil by 9045D**

pH	8.76			pH Units	1	B5E0122	05/01/2025	05/02/2025	
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**SAR by 20B Saturated Paste**

SAR	20.9		0.0100	SAR	1	B5E0115	05/01/2025	05/05/2025	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	2.28		0.00500	mmhos/cm	1	B5E0122	05/01/2025	05/02/2025	
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**Table 915 metals by EPA 6020B**

Arsenic	2.92		0.255	mg/kg	10	B5D2817	04/28/2025	04/29/2025	
Barium	73.9		8.79	"	"	"	"	"	
Cadmium	0.146		0.0879	"	"	"	"	"	
Copper	ND		8.79	"	"	"	"	"	
Lead	7.50		0.879	"	"	"	"	"	
Nickel	8.89		0.879	"	"	"	"	"	

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**FL05(32-14)@3'**  
**4/25/2025 3:09:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**E5D0754-01 (Soil)**  
**Origins Laboratory**

**Table 915 metals by EPA 6020B**

Selenium	0.271		0.229	mg/kg	10	B5D2817	04/28/2025	04/29/2025	
Silver	ND		0.0879	"	"	"	"	"	"
Zinc	40.8		32.5	"	"	"	"	"	"

**Waypoint Analytical, LLC.**

**Total Metals 7196A**

Chromium, Hexavalent	ND	0.514	0.514	mg/Kg	1	A102394	04/25/2025	05/05/2025	J
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**FL05(32-14)@3'-V**  
**4/25/2025 3:09:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0754-02 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>pH in Soil by 9045D</b>									
pH	8.53			pH Units	1	B5E0224	05/02/2025	05/05/2025	

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**GW-FL05(32-14)@2.5'**  
**4/25/2025 2:40:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0754-03 (Water)</b>									
<b>Origins Laboratory</b>									
<b>BTEX+N+TMBs by 8260D</b>									
1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B5D2705	04/27/2025	05/01/2025	U
1,3,5-Trimethylbenzene	ND		2.00	"	"	"	"	"	U
Benzene	2.98		1.00	"	"	"	"	"	
Ethylbenzene	ND		1.00	"	"	"	"	"	U
Naphthalene	ND		2.00	"	"	"	"	"	U
Toluene	2.76		1.00	"	"	"	"	"	
Xylenes, total	ND		1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	108 %			70-130		"	"	"	
Surrogate: Toluene-d8	99.6 %			70-130		"	"	"	
Surrogate: 4-Bromofluorobenzene	98.3 %			70-130		"	"	"	
<b>Chloride and Sulfate By EPA 300.0</b>									
Chloride	666		31.2	mg/L	125	B5D2906	04/29/2025	04/30/2025	
Sulfate	2040		31.2	"	"	"	"	"	
<b>Total Dissolved Solids by 2540C</b>									
Total Dissolved Solids	4310		5.00	"	1	B5D2931	04/29/2025	05/02/2025	

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**FL06(32-14)@3'**  
**4/25/2025 2:57:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0754-04 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	1.40		0.101	mg/L	1	B5D2860	04/28/2025	05/02/2025	
<b>DRO/ORO by EPA 8015D</b>									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5D2923	04/29/2025	04/30/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	77.7 %			50-150		"	"	"	
<b>GBTEX+TMBs by 8260D</b>									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5D2917	04/29/2025	04/29/2025	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	102 %			70-130		"	"	"	
Surrogate: Toluene-d8	98.0 %			70-130		"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %			70-130		"	"	"	

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**FL06(32-14)@3'  
4/25/2025 2:57:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**E5D0754-04 (Soil)  
Origins Laboratory**

**Metals by Saturated Paste by EPA 6010**

Calcium	21.6		0.499	meq/L	10	[CALC]	05/01/2025	05/05/2025	
Magnesium	11.1		0.823	"	"	"	"	"	
Sodium	32.0		0.435	"	"	"	"	"	

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

1-Methylnaphthalene	ND		0.002	mg/kg	1	B5D2930	04/29/2025	05/06/2025	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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**FL06(32-14)@3'**  
**4/25/2025 2:57:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**E5D0754-04 (Soil)**  
**Origins Laboratory**

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

Surrogate: Fluorene-d10	96.6 %			60-130		B5D2930	04/29/2025	05/06/2025	
Surrogate: Anthracene-d10	98.8 %			60-130		"	"	"	
Surrogate: Pyrene-d10	110 %			60-130		"	"	"	
Surrogate: Benzo (a) pyrene-d12	101 %			60-130		"	"	"	

**pH in Soil by 9045D**

pH	8.42			pH Units	1	B5E0122	05/01/2025	05/02/2025	
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**SAR by 20B Saturated Paste**

SAR	7.91	0.0100		SAR	1	B5E0115	05/01/2025	05/05/2025	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	5.39	0.00500		mmhos/cm	1	B5E0122	05/01/2025	05/02/2025	
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**Table 915 metals by EPA 6020B**

Arsenic	3.22	0.253		mg/kg	10	B5D2817	04/28/2025	04/29/2025	
Barium	70.5	8.72		"	"	"	"	"	
Cadmium	0.104	0.0872		"	"	"	"	"	
Copper	ND	8.72		"	"	"	"	"	
Lead	8.09	0.872		"	"	"	"	"	
Nickel	8.60	0.872		"	"	"	"	"	

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FL06(32-14)@3'  
4/25/2025 2:57:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5D0754-04 (Soil)  
Origins Laboratory

**Table 915 metals by EPA 6020B**

Selenium	ND		0.227	mg/kg	10	B5D2817	04/28/2025	04/29/2025	
Silver	ND		0.0872	"	"	"	"	"	"
Zinc	43.3		32.3	"	"	"	"	"	"

Waypoint Analytical, LLC.

**Total Metals 7196A**

Chromium, Hexavalent	ND	0.5	0.5	mg/Kg	1	A102394	04/25/2025	05/05/2025	
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Wheat Ridge CO 80033

Jeremy Espinoza  
Project Number: 09A14171096  
Project: KMG - Herman L 32-14 Wellhead

**FL06(32-14)@3'-V**  
**4/25/2025 2:57:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0754-05 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>pH in Soil by 9045D</b>									
pH	8.14			pH Units	1	B5E0224	05/02/2025	05/05/2025	

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Jeremy Espinoza  
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 Project: KMG - Herman L 32-14 Wellhead

**GW-FL06(32-14)@2.5'**  
**4/25/2025 2:45:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5D0754-06 (Water)</b>									
<b>Origins Laboratory</b>									
<b>BTEX+N+TMBs by 8260D</b>									
1,2,4-Trimethylbenzene	ND		2.00	ug/L	1	B5D2705	04/27/2025	05/01/2025	U
1,3,5-Trimethylbenzene	ND		2.00	"	"	"	"	"	U
Benzene	ND		1.00	"	"	"	"	"	U
Ethylbenzene	ND		1.00	"	"	"	"	"	U
Naphthalene	ND		2.00	"	"	"	"	"	U
Toluene	ND		1.00	"	"	"	"	"	U
Xylenes, total	ND		1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	111 %				70-130	"	"	"	
Surrogate: Toluene-d8	99.3 %				70-130	"	"	"	
Surrogate: 4-Bromofluorobenzene	99.5 %				70-130	"	"	"	
<b>Chloride and Sulfate By EPA 300.0</b>									
Chloride	1210		31.2	mg/L	125	B5D2906	04/29/2025	04/30/2025	
Sulfate	3750		125	"	501	"	"	04/30/2025	
<b>Total Dissolved Solids by 2540C</b>									
Total Dissolved Solids	7310		5.00	"	1	B5D2931	04/29/2025	05/02/2025	

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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 B5D2860 - DTPA Sorbitol Preparation**

**Blank (B5D2860-BLK1)**

Prepared: 04/28/2025 Analyzed: 05/02/2025

Boron ND 0.100 mg/L

**Duplicate (B5D2860-DUP1)**

Source: E5D0743-01

Prepared: 04/28/2025 Analyzed: 05/02/2025

Boron 0.0336 0.101 mg/L 0.0379 12.1 50

**Batch B5D2906 - Filter .45um non acidified**

**Blank (B5D2906-BLK1)**

Prepared: 04/29/2025 Analyzed: 04/30/2025

Chloride ND 0.250 mg/L U

Sulfate ND 0.250 " U

**LCS (B5D2906-BS1)**

Prepared: 04/29/2025 Analyzed: 04/30/2025

Chloride 3.96 0.250 mg/L 4.00 98.9 90-110

Sulfate 3.86 0.250 " 4.00 96.4 90-110

**Matrix Spike (B5D2906-MS1)**

Source: E5D0741-12

Prepared: 04/29/2025 Analyzed: 04/30/2025

Chloride 878 mg/L 500 396 96.4 90-110

Sulfate 1010 " 500 559 89.8 90-110

**Matrix Spike Dup (B5D2906-MSD1)**

Source: E5D0741-12

Prepared: 04/29/2025 Analyzed: 04/30/2025

Chloride 884 mg/L 500 396 97.5 90-110 0.582 5

Sulfate 1020 " 500 559 91.5 90-110 0.882 5 QM-07

**Batch B5D2931 - NO PREP**

**Blank (B5D2931-BLK1)**

Prepared: 04/29/2025 Analyzed: 05/02/2025

Total Dissolved Solids ND 5.00 mg/L U

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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 B5D2931 - NO PREP**

**LCS (B5D2931-BS1)**

Prepared: 04/29/2025 Analyzed: 05/02/2025

Total Dissolved Solids 1010 5.00 mg/L 1030 97.7 90-110

**Duplicate (B5D2931-DUP1)**

**Source: E5D0741-13**

Prepared: 04/29/2025 Analyzed: 05/02/2025

Total Dissolved Solids 2140 5.00 mg/L 2080 2.84 10

**Batch B5E0115 - Saturated Paste Metals**

**Blank (B5E0115-BLK1)**

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

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

**Duplicate (B5E0115-DUP1)**

**Source: E5D0741-09**

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

Calcium PPM 31.9 10.0 mg/L 33.2 4.02 50  
 SAR ND 0.0100 SAR 5.25 200  
 Magnesium PPM 20.7 10.0 mg/L 21.1 2.15 50  
 Sodium PPM 159 10.0 " 157 0.861 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 B5D2930 - EPA 3580**

**Blank (B5D2930-BLK1)**

Prepared: 04/29/2025 Analyzed: 05/05/2025

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 (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

Surrogate: Fluorene-d10	200		ug/kg	200		97.7	60-130			
Surrogate: Anthracene-d10	200		"	200		101	60-130			
Surrogate: Pyrene-d10	210		"	200		106	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		103	60-130			

**LCS (B5D2930-BS1)**

Prepared: 04/29/2025 Analyzed: 05/05/2025

1-Methylnaphthalene	0.198	0.002	mg/kg	0.200		99.0	70-130			
2-Methylnaphthalene	0.197	0.002	"	0.200		98.6	70-130			
Acenaphthene	0.205	0.020	"	0.200		102	70-130			
Anthracene	0.207	0.020	"	0.200		104	70-130			
Benzo (a) anthracene	0.215	0.005	"	0.200		108	70-130			
Benzo (a) pyrene	0.214	0.020	"	0.200		107	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 B5D2930 - EPA 3580**

**LCS (B5D2930-BS1)**

Prepared: 04/29/2025 Analyzed: 05/05/2025

Benzo (b) fluoranthene	0.217	0.020	mg/kg	0.200		109	70-130			
Benzo (k) fluoranthene	0.215	0.020	"	0.200		107	70-130			
Chrysene	0.213	0.020	"	0.200		106	70-130			
Dibenz (a,h) anthracene	0.212	0.020	"	0.200		106	70-130			
Fluoranthene	0.221	0.020	"	0.200		111	70-130			
Fluorene	0.198	0.020	"	0.200		99.0	70-130			
Indeno (1,2,3-cd) pyrene	0.211	0.020	"	0.200		105	70-130			
Naphthalene	0.207	0.002	"	0.200		104	70-130			
Pyrene	0.220	0.020	"	0.200		110	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		98.1	60-130			
Surrogate: Anthracene-d10	200		"	200		99.4	60-130			
Surrogate: Pyrene-d10	210		"	200		106	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		103	60-130			

**Matrix Spike (B5D2930-MS1)**

Source: E5D0739-37

Prepared: 04/29/2025 Analyzed: 05/05/2025

1-Methylnaphthalene	0.192	0.002	mg/kg	0.200	ND	96.1	70-130			
2-Methylnaphthalene	0.192	0.002	"	0.200	ND	96.1	70-130			
Acenaphthene	0.193	0.020	"	0.200	0.002	95.9	70-130			
Anthracene	0.194	0.020	"	0.200	0.001	96.6	70-130			
Benzo (a) anthracene	0.230	0.005	"	0.200	0.002	114	70-130			
Benzo (a) pyrene	0.294	0.020	"	0.200	0.017	139	70-130			QM-07
Benzo (b) fluoranthene	0.336	0.020	"	0.200	0.005	165	70-130			QM-07
Benzo (k) fluoranthene	0.316	0.020	"	0.200	0.004	156	70-130			QM-07
Chrysene	0.244	0.020	"	0.200	0.008	118	70-130			
Dibenz (a,h) anthracene	0.270	0.020	"	0.200	0.012	129	70-130			
Fluoranthene	0.267	0.020	"	0.200	0.001	133	70-130			QM-07
Fluorene	0.192	0.020	"	0.200	0.0005	95.7	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 B5D2930 - EPA 3580**

**Matrix Spike (B5D2930-MS1)**

**Source: E5D0739-37**

Prepared: 04/29/2025 Analyzed: 05/05/2025

Indeno (1,2,3-cd) pyrene	0.266	0.020	mg/kg	0.200	0.009	128	70-130			
Naphthalene	0.192	0.002	"	0.200	ND	96.0	70-130			
Pyrene	0.266	0.020	"	0.200	0.007	130	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		97.8	60-130			
Surrogate: Anthracene-d10	190		"	200		95.6	60-130			
Surrogate: Pyrene-d10	240		"	200		120	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			

**Matrix Spike Dup (B5D2930-MSD1)**

**Source: E5D0739-37**

Prepared: 04/29/2025 Analyzed: 05/05/2025

1-Methylnaphthalene	0.193	0.002	mg/kg	0.200	ND	96.6	70-130	0.534	20	
2-Methylnaphthalene	0.193	0.002	"	0.200	ND	96.5	70-130	0.435	20	
Acenaphthene	0.202	0.020	"	0.200	0.002	100	70-130	4.45	20	
Anthracene	0.193	0.020	"	0.200	0.001	96.1	70-130	0.506	20	
Benzo (a) anthracene	0.216	0.005	"	0.200	0.002	107	70-130	6.52	20	
Benzo (a) pyrene	0.301	0.020	"	0.200	0.017	142	70-130	2.12	20	QM-07
Benzo (b) fluoranthene	0.326	0.020	"	0.200	0.005	160	70-130	2.97	20	QM-07
Benzo (k) fluoranthene	0.312	0.020	"	0.200	0.004	154	70-130	1.29	20	QM-07
Chrysene	0.233	0.020	"	0.200	0.008	113	70-130	4.71	20	
Dibenz (a,h) anthracene	0.278	0.020	"	0.200	0.012	133	70-130	3.12	20	QM-07
Fluoranthene	0.262	0.020	"	0.200	0.001	130	70-130	2.00	20	
Fluorene	0.194	0.020	"	0.200	0.0005	97.0	70-130	1.26	20	
Indeno (1,2,3-cd) pyrene	0.257	0.020	"	0.200	0.009	124	70-130	3.54	20	
Naphthalene	0.202	0.002	"	0.200	ND	101	70-130	4.85	20	
Pyrene	0.265	0.020	"	0.200	0.007	129	70-130	0.588	20	
Surrogate: Fluorene-d10	200		ug/kg	200		97.7	60-130			
Surrogate: Anthracene-d10	190		"	200		93.7	60-130			
Surrogate: Pyrene-d10	230		"	200		115	60-130			

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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 B5D2930 - EPA 3580**

**Matrix Spike Dup (B5D2930-MSD1)**

**Source: E5D0739-37**

Prepared: 04/29/2025 Analyzed: 05/05/2025

Surrogate: Benzo (a) pyrene-d12	200		ug/kg	200		97.8	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
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**Batch B5D2923 - EPA 3550B**

**Blank (B5D2923-BLK1)**

Prepared: 04/29/2025 Analyzed: 04/30/2025

Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	20		"	24.9		80.9	50-150			

**LCS (B5D2923-BS1)**

Prepared: 04/29/2025 Analyzed: 04/30/2025

Diesel (C10-C28)	1110	50.0	mg/kg	1000		111	70-130			
Residual Range Organics (C28-C40)	999	200	"	1000		99.9	70-130			
Surrogate: o-Terphenyl	43		"	49.8		87.0	50-150			

**Matrix Spike (B5D2923-MS1)**

Source: E5D0732-11

Prepared: 04/29/2025 Analyzed: 04/30/2025

Diesel (C10-C28)	1110	50.0	mg/kg	1000	ND	111	70-130			
Residual Range Organics (C28-C40)	1020	200	"	1000	ND	102	70-130			
Surrogate: o-Terphenyl	41		"	49.8		82.2	50-150			

**Matrix Spike Dup (B5D2923-MSD1)**

Source: E5D0732-11

Prepared: 04/29/2025 Analyzed: 04/30/2025

Diesel (C10-C28)	1130	50.0	mg/kg	1000	ND	113	70-130	1.55	35	
Residual Range Organics (C28-C40)	1030	200	"	1000	ND	103	70-130	1.85	35	
Surrogate: o-Terphenyl	40		"	49.8		81.2	50-150			

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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 B5D2817 - EPA 3050B**

**Blank (B5D2817-BLK1)**

Prepared: 04/28/2025 Analyzed: 04/29/2025

Arsenic	ND	0.290	mg/kg							
Barium	ND	10.0	"							
Cadmium	ND	0.100	"							
Copper	ND	10.0	"							
Lead	ND	1.00	"							
Nickel	ND	1.00	"							
Selenium	ND	0.260	"							
Silver	ND	0.100	"							
Zinc	ND	37.0	"							

**LCS (B5D2817-BS1)**

Prepared: 04/28/2025 Analyzed: 04/29/2025

Arsenic	5.26	0.290	mg/kg	5.00		105	80-120			
Barium	517	10.0	"	500		103	80-120			
Cadmium	5.10	0.100	"	5.00		102	80-120			
Copper	53.0	10.0	"	50.0		106	80-120			
Lead	5.04	1.00	"	5.00		101	80-120			
Nickel	5.32	1.00	"	5.00		106	80-120			
Selenium	5.26	0.260	"	5.00		105	80-120			
Silver	5.17	0.100	"	5.00		103	80-120			
Zinc	56.5	37.0	"	50.0		113	80-120			

**Matrix Spike (B5D2817-MS1)**

Source: E5D0656-10

Prepared: 04/28/2025 Analyzed: 04/29/2025

Arsenic	10.8	0.276	mg/kg	4.75	7.75	63.5	75-125			QM-07
Barium	569	9.51	"	475	166	84.9	75-125			
Cadmium	4.89	0.0951	"	4.75	0.0993	101	75-125			
Copper	59.4	9.51	"	47.5	11.4	101	75-125			
Lead	15.7	0.951	"	4.75	11.8	82.4	75-125			

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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 B5D2817 - EPA 3050B**

**Matrix Spike (B5D2817-MS1)**

**Source: E5D0656-10**

Prepared: 04/28/2025 Analyzed: 04/29/2025

Nickel	16.9	0.951	mg/kg	4.75	13.6	70.9	75-125			QM-07
Selenium	5.09	0.247	"	4.75	0.326	100	75-125			
Silver	4.78	0.0951	"	4.75	0.0224	100	75-125			
Zinc	102	35.2	"	47.5	57.8	93.3	75-125			

**Matrix Spike Dup (B5D2817-MSD1)**

**Source: E5D0656-10**

Prepared: 04/28/2025 Analyzed: 04/29/2025

Arsenic	10.4	0.242	mg/kg	4.18	7.75	63.7	75-125	3.36	20	QM-07
Barium	625	8.36	"	418	166	110	75-125	9.37	20	
Cadmium	4.27	0.0836	"	4.18	0.0993	99.7	75-125	13.5	20	
Copper	51.6	8.36	"	41.8	11.4	96.2	75-125	14.1	20	
Lead	14.4	0.836	"	4.18	11.8	61.9	75-125	8.82	20	QM-07
Nickel	15.4	0.836	"	4.18	13.6	44.3	75-125	9.40	20	QM-07
Selenium	4.40	0.217	"	4.18	0.326	97.5	75-125	14.4	20	
Silver	4.15	0.0836	"	4.18	0.0224	98.7	75-125	14.1	20	
Zinc	94.4	30.9	"	41.8	57.8	87.6	75-125	7.89	20	

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 Project Number: 09A14171096  
 Project: KMG - Herman L 32-14 Wellhead

**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 B5E0122 - Saturated Paste pH/EC**

**Blank (B5E0122-BLK1)**

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

Specific Conductance (EC) ND 0.00500 mmhos/cm

**Duplicate (B5E0122-DUP1)**

**Source: E5D0741-09**

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

Specific Conductance (EC)	1.11	0.00500	mmhos/cm	1.11	0.568	25
pH	8.48		pH Units	8.46	0.236	25

**Batch B5E0224 - Saturated Paste pH/EC**

**Duplicate (B5E0224-DUP1)**

**Source: E5D0781-05**

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

pH	8.45		pH Units	8.47	0.236	25
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 Wheat Ridge CO 80033

Jeremy Espinoza  
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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 B5D2705 - EPA 5030B (Water)**

**Blank (B5D2705-BLK1)**

Prepared: 04/27/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	ND	2.00	ug/L							U
1,3,5-Trimethylbenzene	ND	2.00	"							U
Benzene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Naphthalene	ND	2.00	"							U
Toluene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	69		"	62.5		110	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.7	70-130			

**LCS (B5D2705-BS1)**

Prepared: 04/27/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	49.7	2.00	ug/L	50.0		99.4	70-130			
1,3,5-Trimethylbenzene	50.6	2.00	"	50.0		101	70-130			
Benzene	49.2	1.00	"	50.0		98.4	70-130			
Ethylbenzene	49.1	1.00	"	50.0		98.2	70-130			
m,p-Xylene	95.8	2.00	"	100		95.8	70-130			
Naphthalene	49.6	2.00	"	50.0		99.3	70-130			
o-Xylene	48.2	1.00	"	50.0		96.3	70-130			
Toluene	47.7	1.00	"	50.0		95.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5		108	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.6	70-130			

**Matrix Spike (B5D2705-MS1)**

Source: E5D0709-13

Prepared: 04/27/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	41.9	2.00	ug/L	50.0	ND	83.7	70-130			
1,3,5-Trimethylbenzene	42.9	2.00	"	50.0	ND	85.8	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 B5D2705 - EPA 5030B (Water)**

**Matrix Spike (B5D2705-MS1)**

Source: E5D0709-13

Prepared: 04/27/2025 Analyzed: 05/01/2025

Benzene	40.2	1.00	ug/L	50.0	ND	80.4	70-130			
Ethylbenzene	42.5	1.00	"	50.0	ND	85.0	70-130			
m,p-Xylene	82.0	2.00	"	100	ND	82.0	70-130			
Naphthalene	38.7	2.00	"	50.0	ND	77.4	70-130			
o-Xylene	41.6	1.00	"	50.0	ND	83.2	70-130			
Toluene	40.4	1.00	"	50.0	ND	80.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.2	70-130			

**Matrix Spike Dup (B5D2705-MSD1)**

Source: E5D0709-13

Prepared: 04/27/2025 Analyzed: 05/01/2025

1,2,4-Trimethylbenzene	46.2	2.00	ug/L	50.0	ND	92.4	70-130	9.84	20	
1,3,5-Trimethylbenzene	46.9	2.00	"	50.0	ND	93.7	70-130	8.85	20	
Benzene	49.6	1.00	"	50.0	ND	99.2	70-130	21.0	20	QR-02
Ethylbenzene	47.8	1.00	"	50.0	ND	95.7	70-130	11.8	20	
m,p-Xylene	91.8	2.00	"	100	ND	91.8	70-130	11.3	20	
Naphthalene	51.5	2.00	"	50.0	ND	103	70-130	28.3	20	QR-02
o-Xylene	47.3	1.00	"	50.0	ND	94.6	70-130	12.8	20	
Toluene	47.8	1.00	"	50.0	ND	95.6	70-130	16.9	20	
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5		109	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.3	70-130			

**Batch B5D2917 - EPA 5030 (soil)**

**Blank (B5D2917-BLK1)**

Prepared: 04/29/2025 Analyzed: 04/29/2025

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U

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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 B5D2917 - EPA 5030 (soil)**

**Blank (B5D2917-BLK1)**

Prepared: 04/29/2025 Analyzed: 04/29/2025

Benzene	ND	0.00200	mg/kg							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	0.13		"	0.125		100	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		98.6	70-130			

**LCS (B5D2917-BS1)**

Prepared: 04/29/2025 Analyzed: 04/29/2025

1,2,4-Trimethylbenzene	0.102	0.00200	mg/kg	0.100		102	70-130			
1,3,5-Trimethylbenzene	0.102	0.00200	"	0.100		102	70-130			
Benzene	0.0907	0.00200	"	0.100		90.7	70-130			
Ethylbenzene	0.0970	0.00200	"	0.100		97.0	70-130			
Toluene	0.0937	0.00200	"	0.100		93.7	70-130			
o-Xylene	0.101	0.00200	"	0.100		101	70-130			
m,p-Xylene	0.195	0.00400	"	0.200		97.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		97.0	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		103	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

**Matrix Spike (B5D2917-MS1)**

**Source: E5D0671-01**

Prepared: 04/29/2025 Analyzed: 04/29/2025

1,2,4-Trimethylbenzene	0.0980	0.00200	mg/kg	0.100	ND	98.0	70-130			
1,3,5-Trimethylbenzene	0.101	0.00200	"	0.100	ND	101	70-130			
Benzene	0.0893	0.00200	"	0.100	ND	89.3	70-130			
Ethylbenzene	0.106	0.00200	"	0.100	ND	106	70-130			
Toluene	0.0960	0.00200	"	0.100	ND	96.0	70-130			

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**Volatile Organic Compounds by GC/MS SW846 8260D - 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 B5D2917 - EPA 5030 (soil)**

**Matrix Spike (B5D2917-MS1)**

**Source: E5D0671-01**

Prepared: 04/29/2025 Analyzed: 04/29/2025

o-Xylene	0.105	0.00200	mg/kg	0.100	ND	105	70-130			
m,p-Xylene	0.208	0.00400	"	0.200	ND	104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		84.5	70-130			
Surrogate: Toluene-d8	0.14		"	0.125		109	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		106	70-130			

**Matrix Spike Dup (B5D2917-MSD1)**

**Source: E5D0671-01**

Prepared: 04/29/2025 Analyzed: 04/29/2025

1,2,4-Trimethylbenzene	0.0770	0.00200	mg/kg	0.100	ND	77.0	70-130	24.1	20	QR-02
1,3,5-Trimethylbenzene	0.0769	0.00200	"	0.100	ND	76.9	70-130	27.5	20	QR-02
Benzene	0.0851	0.00200	"	0.100	ND	85.1	70-130	4.84	20	
Ethylbenzene	0.0814	0.00200	"	0.100	ND	81.4	70-130	25.9	20	QR-02
Toluene	0.0878	0.00200	"	0.100	ND	87.8	70-130	8.93	20	
o-Xylene	0.0860	0.00200	"	0.100	ND	86.0	70-130	20.4	20	QR-02
m,p-Xylene	0.163	0.00400	"	0.200	ND	81.4	70-130	24.6	20	QR-02
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		95.7	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		106	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		95.0	70-130			

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**Total Metals 7196A - Quality Control  
 Waypoint Analytical, LLC.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A102394 -**

**DUP (L 95052-DUP)**

**Source: 95052**

Prepared: Analyzed: 05/05/2025

Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
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**MS (L 95052-MS)**

**Source: 95052**

Prepared: Analyzed: 05/05/2025

Chromium, Hexavalent	6.44	0.5	mg/Kg	7.77	<0.244	83	75-125			
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**DUP (L 95076-DUP)**

**Source: 95076**

Prepared: Analyzed: 05/05/2025

Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
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**LCS (LCS)**

Prepared: Analyzed: 05/05/2025

Chromium, Hexavalent	6.82	0.5	mg/Kg	8		85	75-125			
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**LRB (LRB)**

Prepared: Analyzed: 05/05/2025

Chromium, Hexavalent	ND	0.5	mg/Kg			-				
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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.
  - J Estimated Value. Analyte below reported quantitation limit.
  - 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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