



Ensolum

April 10, 2025

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Project Name - KMG - Palombo 23-4L Wellhead

Project Number - 09A1417995

Attached are your analytical results for KMG - Palombo 23-4L Wellhead received by Origins Laboratory February 25, 2025. This project is associated with Origins project number E5B0626-01.

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
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Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417995

Project: KMG - Palombo 23-4L Wellhead

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SEP-RISER(23-4L)@4'	E5B0626-01	Soil	February 25, 2025 13:55	02/25/2025 16:10
SEP-RISER(23-4L)@4'-V	E5B0626-02	Soil	February 25, 2025 14:00	02/25/2025 16:10

Chrome VI for SEP-Riser(23-4L)@4' arrived to sublab multiple times with water intrusion due to melted ice/delayed shipping. Analysis cancelled per client's email on 04/09/2025. JAB

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ORIGINS LABORATORY

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

Jeremy Espinoza
 Project Number: 09A1417995
 Project: KMG - Palombo 23-4L Wellhead

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: ES B0626 Client: Ensolium
 Client Project ID: Palombo 23-4L
 Checklist Completed by: WE / NKM Shipped Via: HD
 Date/time completed: 2/25/25 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1,23 °C (Describe)
 Thermometer ID: 7007

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaOH > NaOCl, SrAc > Na ₂ S)			<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.

Reviewed by (Project Manager) AX

Date/Time Reviewed 2/26/25

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 Project Number: 09A1417995
 Project: KMG - Palombo 23-4L Wellhead

SEP-RISER(23-4L)@4'
2/25/2025 1:55:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5B0626-01 (Soil)									
Origins Laboratory									
Boron (DTPA Sorbitol)									
Boron	0.228		0.0984	mg/L	1	B5B2607	02/26/2025	02/27/2025	
DRO/ORO by EPA 8015D									
Diesel (C10-C28)	ND		25.0	mg/kg	1	B5B2601	02/26/2025	02/26/2025	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U
Surrogate: o-Terphenyl	59.7 %								
GBTEX+TMBs by 8260D									
1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B5B2624	02/26/2025	02/27/2025	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	116 %								
Surrogate: Toluene-d8	95.6 %								
Surrogate: 4-Bromofluorobenzene	101 %								

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**SEP-RISER(23-4L)@4'
2/25/2025 1:55:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5B0626-01 (Soil) Origins Laboratory									
Metals by Saturated Paste by EPA 6010									
Calcium	1.53		0.499	meq/L	10	[CALC]	02/26/2025	02/28/2025	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	2.38		0.435	"	"	"	"	"	
PAH by EPA 8270E extracted via 3580A									
1-Methylnaphthalene	ND		0.002	mg/kg	1	B5B2633	02/26/2025	02/27/2025	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

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SEP-RISER(23-4L)@4'
2/25/2025 1:55:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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E5B0626-01 (Soil)
Origins Laboratory

PAH by EPA 8270E extracted via 3580A

Pyrene	ND		0.020	mg/kg	1	B5B2633	02/26/2025	02/27/2025	U
Surrogate: Fluorene-d10	102 %			60-130		"	"	"	
Surrogate: Anthracene-d10	104 %			60-130		"	"	"	
Surrogate: Pyrene-d10	97.4 %			60-130		"	"	"	
Surrogate: Benzo (a) pyrene-d12	102 %			60-130		"	"	"	

pH in Soil by 9045D

pH	8.09			pH Units	1	B5B2617	02/26/2025	02/27/2025	
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SAR by 20B Saturated Paste

SAR	2.33		0.0100	SAR	1	B5B2612	02/26/2025	02/28/2025	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.481		0.00500	mmhos/cm	1	B5B2617	02/26/2025	02/27/2025	
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Table 915 metals by EPA 6020B

Arsenic	3.16		0.256	mg/kg	10	B5B2603	02/26/2025	02/27/2025	
Barium	87.4		8.82	"	"	"	"	"	
Cadmium	0.183		0.0882	"	"	"	"	"	
Copper	10.5		8.82	"	"	"	"	"	

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Project: KMG - Palombo 23-4L Wellhead

**SEP-RISER(23-4L)@4'
2/25/2025 1:55:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5B0626-01 (Soil) Origins Laboratory									
Table 915 metals by EPA 6020B									
Lead	10.3		0.882	mg/kg	10	B5B2603	02/26/2025	02/27/2025	
Nickel	7.46		0.882	"	"	"	"	"	
Selenium	ND		0.229	"	"	"	"	"	
Silver	ND		0.0882	"	"	"	"	"	
Zinc	50.9		32.6	"	"	"	"	"	

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SEP-RISER(23-4L)@4'-V

2/25/2025 2:00:00PM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
E5B0626-02 (Soil)									
Origins Laboratory									
pH in Soil by 9045D									
pH	8.34			pH Units	1	B5B2727	02/27/2025	02/28/2025	

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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 B5B2607 - DTPA Sorbitol Preparation

Blank (B5B2607-BLK1)

Prepared: 02/26/2025 Analyzed: 02/27/2025

Boron ND 0.100 mg/L

Duplicate (B5B2607-DUP1)

Source: E5B0625-01

Prepared: 02/26/2025 Analyzed: 02/27/2025

Boron 0.0469 0.0989 mg/L 0.314 148 50 QR-DUP

Batch B5B2612 - Saturated Paste Metals

Blank (B5B2612-BLK1)

Prepared: 02/26/2025 Analyzed: 02/28/2025

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 (B5B2612-DUP1)

Source: E5B0625-01

Prepared: 02/26/2025 Analyzed: 02/28/2025

Calcium PPM 47.1 10.0 mg/L 37.9 21.6 50

SAR ND 0.0100 SAR 0.0709 200

Magnesium PPM 7.18 10.0 mg/L 5.99 18.1 50

Sodium PPM 1.74 10.0 " 1.78 2.27 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 B5B2633 - EPA 3580

Blank (B5B2633-BLK1)

Prepared: 02/26/2025 Analyzed: 02/26/2025

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	101	60-130				
Surrogate: Anthracene-d10	220		"	200	108	60-130				
Surrogate: Pyrene-d10	190		"	200	97.5	60-130				
Surrogate: Benzo (a) pyrene-d12	210		"	200	103	60-130				

LCS (B5B2633-BS1)

Prepared: 02/26/2025 Analyzed: 02/26/2025

1-Methylnaphthalene	0.186	0.002	mg/kg	0.200	93.0	70-130				
2-Methylnaphthalene	0.188	0.002	"	0.200	93.8	70-130				
Acenaphthene	0.191	0.020	"	0.200	95.6	70-130				
Anthracene	0.218	0.020	"	0.200	109	70-130				
Benzo (a) anthracene	0.208	0.005	"	0.200	104	70-130				
Benzo (a) pyrene	0.212	0.020	"	0.200	106	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 B5B2633 - EPA 3580

LCS (B5B2633-BS1)

Prepared: 02/26/2025 Analyzed: 02/26/2025

Benzo (b) fluoranthene	0.187	0.020	mg/kg	0.200		93.4	70-130			
Benzo (k) fluoranthene	0.174	0.020	"	0.200		87.2	70-130			
Chrysene	0.192	0.020	"	0.200		96.0	70-130			
Dibenz (a,h) anthracene	0.210	0.020	"	0.200		105	70-130			
Fluoranthene	0.204	0.020	"	0.200		102	70-130			
Fluorene	0.200	0.020	"	0.200		99.8	70-130			
Indeno (1,2,3-cd) pyrene	0.207	0.020	"	0.200		104	70-130			
Naphthalene	0.192	0.002	"	0.200		95.8	70-130			
Pyrene	0.203	0.020	"	0.200		101	70-130			

Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	210		"	200		104	60-130			
Surrogate: Pyrene-d10	200		"	200		99.3	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		105	60-130			

Matrix Spike (B5B2633-MS1)

Source: E5B0622-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

1-Methylnaphthalene	0.189	0.002	mg/kg	0.200	0.002	93.3	70-130			
2-Methylnaphthalene	0.191	0.002	"	0.200	0.002	94.8	70-130			
Acenaphthene	0.194	0.020	"	0.200	0.002	96.3	70-130			
Anthracene	0.205	0.020	"	0.200	0.0006	102	70-130			
Benzo (a) anthracene	0.211	0.005	"	0.200	ND	106	70-130			
Benzo (a) pyrene	0.221	0.020	"	0.200	0.0004	110	70-130			
Benzo (b) fluoranthene	0.192	0.020	"	0.200	0.001	95.4	70-130			
Benzo (k) fluoranthene	0.176	0.020	"	0.200	0.0007	87.7	70-130			
Chrysene	0.196	0.020	"	0.200	0.0003	97.9	70-130			
Dibenz (a,h) anthracene	0.213	0.020	"	0.200	0.001	106	70-130			
Fluoranthene	0.208	0.020	"	0.200	ND	104	70-130			
Fluorene	0.200	0.020	"	0.200	0.0009	99.5	70-130			

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 Project: KMG - Palombo 23-4L Wellhead

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 B5B2633 - EPA 3580

Matrix Spike (B5B2633-MS1)		Source: E5B0622-01			Prepared: 02/26/2025 Analyzed: 02/26/2025					
Indeno (1,2,3-cd) pyrene	0.208	0.020	mg/kg	0.200	0.001	104	70-130			
Naphthalene	0.195	0.002	"	0.200	ND	97.4	70-130			
Pyrene	0.203	0.020	"	0.200	ND	102	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		100	60-130			
Surrogate: Anthracene-d10	210		"	200		106	60-130			
Surrogate: Pyrene-d10	200		"	200		99.8	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		106	60-130			

Matrix Spike Dup (B5B2633-MSD1)		Source: E5B0622-01			Prepared: 02/26/2025 Analyzed: 02/26/2025					
1-Methylnaphthalene	0.188	0.002	mg/kg	0.200	0.002	93.0	70-130	0.320	20	
2-Methylnaphthalene	0.188	0.002	"	0.200	0.002	93.4	70-130	1.42	20	
Acenaphthene	0.193	0.020	"	0.200	0.002	95.4	70-130	0.983	20	
Anthracene	0.213	0.020	"	0.200	0.0006	106	70-130	3.56	20	
Benzo (a) anthracene	0.213	0.005	"	0.200	ND	107	70-130	1.09	20	
Benzo (a) pyrene	0.206	0.020	"	0.200	0.0004	103	70-130	6.62	20	
Benzo (b) fluoranthene	0.191	0.020	"	0.200	0.001	95.1	70-130	0.376	20	
Benzo (k) fluoranthene	0.212	0.020	"	0.200	0.0007	106	70-130	18.5	20	
Chrysene	0.194	0.020	"	0.200	0.0003	97.1	70-130	0.880	20	
Dibenz (a,h) anthracene	0.206	0.020	"	0.200	0.001	102	70-130	3.25	20	
Fluoranthene	0.208	0.020	"	0.200	ND	104	70-130	0.191	20	
Fluorene	0.201	0.020	"	0.200	0.0009	100	70-130	0.493	20	
Indeno (1,2,3-cd) pyrene	0.199	0.020	"	0.200	0.001	98.9	70-130	4.61	20	
Naphthalene	0.193	0.002	"	0.200	ND	96.3	70-130	1.09	20	
Pyrene	0.202	0.020	"	0.200	ND	101	70-130	0.681	20	
Surrogate: Fluorene-d10	200		ug/kg	200		102	60-130			
Surrogate: Anthracene-d10	220		"	200		108	60-130			
Surrogate: Pyrene-d10	200		"	200		98.1	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 B5B2633 - EPA 3580

Matrix Spike Dup (B5B2633-MSD1)

Source: E5B0622-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

Surrogate: Benzo (a) pyrene-d12	210		ug/kg	200		103	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 B5B2601 - EPA 3550B

Prepared: 02/26/2025 Analyzed: 02/26/2025

Blank (B5B2601-BLK1)

Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	16		"	24.9		63.6	50-150			

LCS (B5B2601-BS1)

Prepared: 02/26/2025 Analyzed: 02/26/2025

Diesel (C10-C28)	970	50.0	mg/kg	1000		97.0	70-130			
Residual Range Organics (C28-C40)	920	200	"	1000		92.0	70-130			
Surrogate: o-Terphenyl	49		"	49.8		99.4	50-150			

Matrix Spike (B5B2601-MS1)

Source: E5B0601-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

Diesel (C10-C28)	920	50.0	mg/kg	1000	ND	92.0	70-130			
Residual Range Organics (C28-C40)	877	200	"	1000	ND	87.7	70-130			
Surrogate: o-Terphenyl	40		"	49.8		80.5	50-150			

Matrix Spike Dup (B5B2601-MSD1)

Source: E5B0601-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

Diesel (C10-C28)	979	50.0	mg/kg	1000	ND	97.9	70-130	6.14	35	
Residual Range Organics (C28-C40)	942	200	"	1000	ND	94.2	70-130	7.18	35	
Surrogate: o-Terphenyl	48		"	49.8		95.9	50-150			

Origins Laboratory

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

Jeremy Espinoza
 Project Number: 09A1417995
 Project: KMG - Palombo 23-4L Wellhead

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 B5B2603 - EPA 3050B

Blank (B5B2603-BLK1)

Prepared: 02/26/2025 Analyzed: 02/27/2025

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 (B5B2603-BS1)

Prepared: 02/26/2025 Analyzed: 02/27/2025

Arsenic	5.93	0.290	mg/kg	5.00	119	80-120				
Barium	568	10.0	"	500	114	80-120				
Cadmium	5.78	0.100	"	5.00	116	80-120				
Copper	57.6	10.0	"	50.0	115	80-120				
Lead	5.62	1.00	"	5.00	112	80-120				
Nickel	5.90	1.00	"	5.00	118	80-120				
Selenium	5.89	0.260	"	5.00	118	80-120				
Silver	5.87	0.100	"	5.00	117	80-120				
Zinc	59.8	37.0	"	50.0	120	80-120				

Matrix Spike (B5B2603-MS1)

Source: E5B0621-01

Prepared: 02/26/2025 Analyzed: 02/27/2025

Arsenic	10.1	0.273	mg/kg	4.71	2.53	160	75-125			QM-07
Barium	703	9.43	"	471	136	120	75-125			
Cadmium	5.71	0.0943	"	4.71	0.0948	119	75-125			
Copper	62.8	9.43	"	47.1	6.03	120	75-125			
Lead	12.9	0.943	"	4.71	6.23	142	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 B5B2603 - EPA 3050B

Matrix Spike (B5B2603-MS1)

Source: E5B0621-01

Prepared: 02/26/2025 Analyzed: 02/27/2025

Nickel	12.8	0.943	mg/kg	4.71	5.90	146	75-125			QM-07
Selenium	5.75	0.245	"	4.71	0.0985	120	75-125			
Silver	5.59	0.0943	"	4.71	0.0285	118	75-125			
Zinc	88.2	34.9	"	47.1	27.7	128	75-125			QM-07

Matrix Spike Dup (B5B2603-MSD1)

Source: E5B0621-01

Prepared: 02/26/2025 Analyzed: 02/27/2025

Arsenic	7.60	0.270	mg/kg	4.66	2.53	109	75-125	27.8	20	QR-DUP
Barium	619	9.33	"	466	136	104	75-125	12.7	20	
Cadmium	5.11	0.0933	"	4.66	0.0948	107	75-125	11.2	20	
Copper	54.7	9.33	"	46.6	6.03	104	75-125	13.8	20	
Lead	11.3	0.933	"	4.66	6.23	109	75-125	13.4	20	
Nickel	10.5	0.933	"	4.66	5.90	97.6	75-125	20.0	20	
Selenium	5.10	0.242	"	4.66	0.0985	107	75-125	12.0	20	
Silver	5.06	0.0933	"	4.66	0.0285	108	75-125	9.90	20	
Zinc	77.8	34.5	"	46.6	27.7	107	75-125	12.6	20	

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Jeremy Espinoza
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 Project: KMG - Palombo 23-4L 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 B5B2617 - Saturated Paste pH/EC

Blank (B5B2617-BLK1)

Prepared: 02/26/2025 Analyzed: 02/27/2025

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B5B2617-DUP1)

Source: E5B0625-01

Prepared: 02/26/2025 Analyzed: 02/27/2025

pH 7.88 pH Units 8.10 2.75 25

Specific Conductance (EC) 0.381 0.00500 mmhos/cm 0.350 8.59 25

Batch B5B2727 - Saturated Paste pH/EC

Duplicate (B5B2727-DUP1)

Source: E5B0623-01

Prepared: 02/27/2025 Analyzed: 02/28/2025

pH 8.71 pH Units 8.83 1.37 25

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 Project: KMG - Palombo 23-4L Wellhead

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 B5B2624 - EPA 5030 (soil)

Blank (B5B2624-BLK1)

Prepared: 02/26/2025 Analyzed: 02/26/2025

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
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U

Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130
Surrogate: Toluene-d8	0.12		"	0.125		96.8	70-130
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130

LCS (B5B2624-BS1)

Prepared: 02/26/2025 Analyzed: 02/26/2025

1,2,4-Trimethylbenzene	0.0954	0.00200	mg/kg	0.100		95.4	70-130
1,3,5-Trimethylbenzene	0.0942	0.00200	"	0.100		94.2	70-130
Benzene	0.0919	0.00200	"	0.100		91.9	70-130
Ethylbenzene	0.0984	0.00200	"	0.100		98.4	70-130
Toluene	0.0967	0.00200	"	0.100		96.7	70-130

Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		103	70-130
Surrogate: Toluene-d8	0.12		"	0.125		97.1	70-130
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		97.9	70-130

Matrix Spike (B5B2624-MS1)

Source: E5B0601-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

1,2,4-Trimethylbenzene	0.0883	0.00200	mg/kg	0.100	ND	88.3	70-130
1,3,5-Trimethylbenzene	0.0870	0.00200	"	0.100	ND	87.0	70-130
Benzene	0.0888	0.00200	"	0.100	ND	88.8	70-130
Ethylbenzene	0.0915	0.00200	"	0.100	ND	91.5	70-130
Toluene	0.0917	0.00200	"	0.100	ND	91.7	70-130

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Jeremy Espinoza
 Project Number: 09A1417995
 Project: KMG - Palombo 23-4L Wellhead

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 B5B2624 - EPA 5030 (soil)

Matrix Spike (B5B2624-MS1)

Source: E5B0601-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

Surrogate: 1,2-Dichloroethane-d4	0.13		mg/kg	0.125		106	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		96.5	70-130			

Matrix Spike Dup (B5B2624-MSD1)

Source: E5B0601-01

Prepared: 02/26/2025 Analyzed: 02/26/2025

1,2,4-Trimethylbenzene	0.0841	0.00200	mg/kg	0.100	ND	84.1	70-130	4.87	20	
1,3,5-Trimethylbenzene	0.0832	0.00200	"	0.100	ND	83.2	70-130	4.51	20	
Benzene	0.0871	0.00200	"	0.100	ND	87.1	70-130	1.93	20	
Ethylbenzene	0.0889	0.00200	"	0.100	ND	88.9	70-130	2.91	20	
Toluene	0.0899	0.00200	"	0.100	ND	89.9	70-130	1.98	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		97.8	70-130			

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Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417995

Project: KMG - Palombo 23-4L Wellhead

Notes and Definitions

U Sample is Non-Detect.

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

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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