

**TABLE 1**  
**SOIL SAMPLE FIELD DATA SUMMARY TABLE**  
**PSC 15-10, FSV 24A 4 O SA FACILITY**  
**WELD COUNTY, COLORADO**  
**KERR-MCGEE OIL AND GAS ONSHORE, LP**

Soil Sample Location	Date	Depth (ft. bgs)	PID Reading (ppm)	Visual Observation	Olfactory Observation	Latitude	Longitude	Submitted for Lab Analysis? (Y/N)
<b>ABOVEGROUND STORAGE TANK SAMPLES</b>								
AST01-HATCH	10/23/2023	0.5	0.2	NS	NO	40.238929	-104.876632	N
AST01 LOADOUT	10/23/2023	0.5	0.4	NS	NO	40.238926	-104.876684	N
AST01@0.5'	10/23/2023	0.5	0.9	NS	NO	40.238927	-104.87666	Y
AST02@0.5'	10/23/2023	0.5	2.5	NS	NO	40.238882	-104.876634	Y
AST02 LOADOUT	10/23/2023	0.5	0.7	NS	NO	40.238885	-104.87668	N
AST02-BASE	10/23/2023	0.5	0.8	NS	NO	40.238883	-104.876656	N
<b>PRODUCED WATER VESSEL SAMPLES</b>								
N WALL	10/23/2023	2.5	276.2	NS	NO	40.2388616	-104.876649	N
E WALL	10/23/2023	2.5	110.0	NS	NO	40.2388488	-104.8766317	N
S WALL	10/23/2023	2.5	9.5	NS	NO	40.2388372	-104.876649	N
PWV-W01@2.5'	10/23/2023	2.5	1145.0	NS	NO	40.2388506	-104.8766654	Y
PWV-B01@5'	10/23/2023	5	476.0	NS	NO	40.2388504	-104.8766493	Y
<b>SEPARATOR SAMPLES</b>								
SEP01-INLET@4'	10/23/2023	4	0.7	NS	NO	40.238525	-104.876573	Y
SEP01-OUTLET@4'	10/23/2023	4	3.7	NS	NO	40.238561	-104.876594	Y
<b>MISCELLANEOUS SAMPLES</b>								
FL01@4'	10/23/2023	4	169.0	Stain	Odor	40.23877047	-104.876682	Y
ECD	10/23/2023	0.5	1.2	NS	NO	40.238772	-104.876415	N
MH01-INLET	10/23/2023	0.5	0.7	NS	NO	40.238500	-104.876658	N
MH02-INLET	10/23/2023	0.5	2.0	NS	NO	40.238513	-104.87663	N
<b>BACKGROUND SOIL SAMPLES</b>								
TB-BG01@0.5'	10/23/2023	0.5	3.0	NS	NO	40.238953	-104.876637	Y
NATIVE-BG01@3'	10/23/2023	3	1.6	NS	NO	40.238715	-104.876403	Y
NATIVE-BG01@6'	10/23/2023	6	1.3	NS	NO	40.238715	-104.876403	Y
NATIVE-BG02@3'	10/23/2023	3	0.6	NS	NO	40.238421	-104.87658	Y
NATIVE-BG02@6'	10/23/2023	6	0.4	NS	NO	40.238421	-104.87658	Y

**Notes:**

ft. - feet

bgs - below ground surface

PID - Photoionization detector

ppm - parts per million

NS - No Staining

NO - No Odor

NA - Not Analyzed/Not Applicable

TABLE 2-1  
SOIL SAMPLE ANALYTICAL RESULTS  
VOLATILE ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS  
PSC 15-10FSV, 24A&4 O SA FACILITY  
WELD COUNTY, COLORADO  
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	TPH-GRO <sup>+</sup> (mg/kg)	TPH-DRO <sup>+</sup> (mg/kg)	TPH-RRO <sup>+</sup> (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1,2,4- Trimethyl benzene (mg/kg)	1,3,5- Trimethyl benzene (mg/kg)	Naphthalene (mg/kg)
Groundwater Protection Values (GPV)			500	500	500	0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038
ABOVEGROUND STORAGE TANK SAMPLES												
AST01@0.5'	10/23/2023	0.5	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002
AST02@0.5'	10/23/2023	0.5	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002
PRODUCED WATER VESSEL SAMPLES												
PWV-B01@5'	10/23/2023	5	6.13	386	109	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.0101	0.039
PWV-W01@2.5'	10/23/2023	2.5	1770	3420	1340	0.0570	<0.0500	<0.0500	27.6	17.2	8.13	1.60
SEPARATOR SAMPLES												
SEP01-INLET@4'	10/23/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380
SEP01-OUTLET@4'	10/23/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380
POTHOLE SAMPLE												
FL01@4'	10/23/2023	4	0.639	34.2	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.012

TABLE 2-2  
SOIL SAMPLE ANALYTICAL RESULTS  
POLYCYCLIC AROMATIC HYDROCARBONS  
PSC 15-10FSV, 24A&4 O SA FACILITY  
WELD COUNTY, COLORADO  
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	Acenaphthene (mg/Kg)	Anthracene (mg/Kg)	Benzo (a) anthracene (mg/Kg)	Benzo (b) fluoranthene (mg/Kg)	Benzo (k) fluoranthene (mg/Kg)	Benzo (a) pyrene (mg/Kg)	Chrysene (mg/Kg)	Dibenz (a,h) anthracene (mg/Kg)	Fluoranthene (mg/Kg)	Fluorene (mg/Kg)	Indeno (1,2,3-cd) pyrene (mg/Kg)	1-Methyl naphthalene (mg/Kg)	2-Methyl naphthalene (mg/Kg)	Pyrene (mg/Kg)
Groundwater Protection Values (GPV)			0.55	5.8	0.011	0.3	2.9	0.24	9	0.096	8.9	0.54	0.98	0.006	0.019	1.3
ABOVEGROUND STORAGE TANK SAMPLES																
AST01@0.5'	10/23/2023	0.5	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.002	<0.002	<0.020
AST02@0.5'	10/23/2023	0.5	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.009	0.023	<0.020
PRODUCED WATER VESSEL SAMPLES																
PWV-B01@5'	10/23/2023	5	0.067	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.069	<0.020	0.285	0.397	<0.020
PWV-W01@2.5'	10/23/2023	2.5	0.534	0.070	<0.010	<0.040	<0.040	0.059	0.049	<0.040	<0.020	0.682	<0.040	3.55	6.92	<0.040
SEPARATOR SAMPLES																
SEP01-INLET@4'	10/23/2023	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEP01-OUTLET@4'	10/23/2023	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POTHOLE SAMPLE																
FL01@4'	10/23/2023	4	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.024	0.053	<0.020

TABLE 2-3  
SOIL SAMPLE ANALYTICAL RESULTS  
SOIL SUITABILITY FOR RECLAMATION  
PSC 15-10FSV, 24A&4 O SA FACILITY  
WELD COUNTY, COLORADO  
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	EC (mmhos/cm)	SAR	pH	Boron (mg/L)
Groundwater Protection Values (GPV)			4	6	6-8.3	2
<b>ABOVEGROUND STORAGE TANK SAMPLES</b>						
AST01 @0.5'	10/23/2023	0.5	1.32	0.123	4.45	<0.100
AST02 @0.5'	10/23/2023	0.5	0.0807	0.395	5.49	<0.0991
<b>PRODUCED WATER VESSEL SAMPLES</b>						
PWV-B01 @5'	10/23/2023	5	0.635	1.47	7.86	0.154
PWV-W01 @2.5'	10/23/2023	2.5	1.83	28.5	7.61	2.60
<b>SEPARATOR SAMPLES</b>						
SEP01-INLET @4'	10/23/2023	4	0.287	0.164	8.07	<0.0991
SEP01-OUTLET @4'	10/23/2023	4	0.634	2.45	8.13	0.760
<b>POTHOLE SAMPLE</b>						
FL01 @4'	10/23/2023	4	0.770	4.14	8.04	0.304
<b>BACKGROUND SAMPLES</b>						
TB-BG01 @0.5'	10/23/2023	0.5	0.125	0.159	7.85	<0.100
NATIVE-BG01 @3'	10/23/2023	3	0.292	0.455	8.24	<0.0986
NATIVE-BG01 @6'	10/23/2023	6	0.318	0.535	8.19	0.114
NATIVE-BG02 @3'	10/23/2023	3	0.116	0.481	7.22	<0.100
NATIVE-BG02 @6'	10/23/2023	6	0.129	0.550	7.18	<0.101

TABLE 2-4  
SOIL SAMPLE ANALYTICAL RESULTS  
METALS  
PSC 15-10FSV, 24A&4 O SA FACILITY  
WELD COUNTY, COLORADO  
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
Groundwater Protection Value (GPV)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
ABOVEGROUND STORAGE TANK SAMPLES												
AST01 @0.5'	10/23/2023	0.5	1.75*	36.0	<0.0846	<0.254	<8.46	<8.46	<8.46	<0.0846	<0.0846	<84.6
AST02 @0.5'	10/23/2023	0.5	1.77*	45.0	0.103	<0.347	<9.09	<9.09	<9.09	<0.0909	<0.0909	<90.9
PRODUCED WATER VESSEL SAMPLES												
PWV-B01 @5'	10/23/2023	5	1.86*	57.6	0.143	<0.303	<9.06	12.8	<9.06	0.163	<0.0906	<90.6
PWV-W01 @2.5'	10/23/2023	2.5	1.67*	62.7	0.153	<0.284	<9.45	10.4	<9.45	0.113	<0.0945	<94.5
SEPARATOR SAMPLES												
SEP01-INLET @4'	10/23/2023	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEP01-OUTLET @4'	10/23/2023	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POTHOLE SAMPLE												
FL01 @4'	10/23/2023	4	1.96*	59.5	0.120	<0.357	<8.93	10.3	<8.93	<0.0893	<0.0893	<89.3
BACKGROUND SAMPLES												
TB-BG01 @0.5'	10/23/2023	0.5	2.05	47.6	<0.0875	<0.296	<8.75	<8.75	<8.75	0.0927	<0.0875	<87.5
NATIVE-BG01 @3'	10/23/2023	3	1.60	49.1	<0.0914	<0.268	<9.14	<9.14	<9.14	<0.0914	<0.0914	<91.4
NATIVE-BG01 @6'	10/23/2023	6	1.46	22.0	<0.0914	<0.281	<9.14	<9.14	<9.14	<0.0914	<0.0914	<91.4
NATIVE-BG02 @3'	10/23/2023	3	0.661	10.1	<0.0925	<0.335	<9.25	<9.25	<9.25	<0.0925	<0.0925	<92.5
NATIVE-BG02 @6'	10/23/2023	6	1.83	26.1	<0.0835	<0.233	<8.35	<8.35	<8.35	<0.0835	<0.0835	<83.5

TABLE 2-5  
SOIL SAMPLE ANALYTICAL RESULTS  
NOTES  
PSC 15-10FSV, 24A&4 O SA FACILITY  
WELD COUNTY, COLORADO  
KERR-MCGEE OIL AND GAS ONSHORE, LP

**Notes:**

GPV - Groundwater Protection Values (mg/kg)

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

RRO - Residual Range Organics

\*Allowable level for TPH is 500 mg/kg for combined GRO, DRO, ORO

\*Exceeds Table 915-1 allowable level but within the analytical variability of background

EC - Electrical Conductivity

SAR - Sodium Adsorption Ratio

mmhos/cm - millimhos per centimeter

<0.00200 - less than laboratory reporting limit

NA - Not Analyzed/Not Applicable

**Bold** - exceeds Table 915-1 allowable level

November 07, 2023

Ensolum

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

**Project Name - KMG - PSC 15-10 FSV, 24A&4 O  
SA Facility**

**Project Number - 09A1417392**

Attached are your analytical results for KMG - PSC 15-10 FSV, 24A&4 O SA Facility received by Origins Laboratory, Inc. October 23, 2023. This project is associated with Origins project number Y310611-01.

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, Inc.  
303.433.1322  
o-squad@oelabinc.com



Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA  
Facility

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWV-B01@5'	Y310611-01	Soil	October 23, 2023 10:45	10/23/2023 15:40
PWV-W01@2.5'	Y310611-02	Soil	October 23, 2023 10:55	10/23/2023 15:40
AST01@0.5'	Y310611-03	Soil	October 23, 2023 11:05	10/23/2023 15:40
AST02@0.5'	Y310611-04	Soil	October 23, 2023 11:10	10/23/2023 15:40
SEP01-OUTLET@4'	Y310611-05	Soil	October 23, 2023 12:00	10/23/2023 15:40
SEP01-INLET@4'	Y310611-06	Soil	October 23, 2023 12:10	10/23/2023 15:40
FL01@4'	Y310611-07	Soil	October 23, 2023 13:35	10/23/2023 15:40
TB-BG01@0.5'	Y310611-08	Soil	October 23, 2023 11:15	10/23/2023 15:40
NATIVE-BG01@3'	Y310611-09	Soil	October 23, 2023 12:30	10/23/2023 15:40
NATIVE-BG01@6'	Y310611-10	Soil	October 23, 2023 12:40	10/23/2023 15:40
NATIVE-BG02@3'	Y310611-11	Soil	October 23, 2023 12:45	10/23/2023 15:40
NATIVE-BG02@6'	Y310611-12	Soil	October 23, 2023 12:50	10/23/2023 15:40

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in  
accordance with the chain of custody document. This  
analytical report must be reproduced in its entirety.*



Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**ORIGINS**  
LABORATORY, INC

INITIAL ☒ IMPACTED ☐

www.originslaboratory.com

page 1 of 2

**Client:** Ensolum LLC

**Address:**

**Telephone Number:** KMG Team

**Email Address:**

**Project Manager:** Jeremy Espinoza

**Project Name:** PSC 15-10 FSV, 24A&4 O SA Facility

**Project Number:** 09A1417392

**Samples Collected By:** Glenn Thompson

Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Soil	Full Table 915-1	BTEXN	1,2,4,1,3,5-TMB	TH-GRD/ROXO	EPT/SA/ROXO (SP)	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other							
PW1-B601-5'	10-23-23	1045	3	X				X	X					<p>915 metals added to B-601 @ 0.5'</p> <p>all native samples per clients email on 10/20/23</p>
PW1-W01-2.5'		1055	1					X						
AST01-0.5'		1105	1					X						
AST02-0.5'		1110	1					X						
Sep01-W01-4'		1200	1					X	X	X				
Sep01-N01-4'		1210	1					X	X	X				
Fl01-4'		1335	1					X						
TB-B601-0.5'		1115	1											
Native B601-3'		1230	1											
Native B601-6'		1240	1											
Relinquished By:	Date: 10/23/23	Time: 1540	Received By:	Date: 10/23/23	Time: 1540	Turnaround Time:								
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Same Day <input type="checkbox"/>	24 Hr <input type="checkbox"/>	48 Hr <input type="checkbox"/>	72 Hr <input type="checkbox"/>					

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322

7 Date Results Needed

Origins Laboratory, Inc.

*Bynon*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

www.originslaboratory.com

INITIAL ☒ IMPACTED ☐

page 2 of 2

11049

Client: Ensolum LLC

Address:

Telephone Number:

Email Address:

Project Manager: Jeremy Espinoza

Project Name: PSC 15-10 FSV 24A&4 O SA Facility

Project Number: 09A1417392

Samples Collected By: Glenn Thompson

Relinquished By: [Signature]

Relinquished By: [Signature]

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative	Soil	Groundwater	Other	HNO <sub>3</sub>	HCl	Unpreserved	Full Table 915-1	BTEXN	1,2,4/1,3,5-TMB	TPH-GRO/DRO/RO	ECPT/SAF/Bioson (SP)	Sample Instructions
NATIVE B502-3'	10-23-23	1245	3		X					X					X	1
NATIVE B502-6'	10-23-23	1250	3		X					X					X	2
																3
																4
																5
																6
																7
																8
																9
																10

Relinquished By: [Signature]

Relinquished By: [Signature]

Date: 10/23/23 Time: 1540

Date: 10/23/23 Time: 1540

Received By: [Signature]

Received By: [Signature]

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☐

Date Results Needed: 8

Origins Laboratory, Inc.

[Signature]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 48101211 Client: Ensolum  
Client Project ID: PSC FSV facility

Checklist Completed by: TOTIENS Shipped Via: 11P  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)  
Date/time completed: 10/23/23 Airbill #: N/A

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

Cooler Number/Temperature: 1 / 8 °C 1 °C 1 °C  
Thermometer ID: 7004

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"/>		<u>SD</u>
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 analysis in order to insure sample integrity)/(pH < 2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with NaAsO <sub>2</sub> +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 in the additional comments (above) and the case narrative.

Reviewed by (Project Manager): UCS Date/Time Reviewed: 10/23/23

Origins Laboratory, Inc.

*J. Bynon*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-B01@5'

10/23/2023 10:45:00AM

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

Origins Laboratory, Inc.  
Y310611-01 (Soil)

## Boron (DTPA Sorbitol)

Boron	0.154	0.101	mg/L	1	B3J2410	10/24/2023	10/25/2023
-------	-------	-------	------	---	---------	------------	------------

## DRO/ORO by EPA 8015D

Diesel (C10-C28)	386	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023
Residual Range Organics (C28-C40)	109	100	"	"	"	"	"

Surrogate: o-Terphenyl	104 %	50-150	"	"	"
------------------------	-------	--------	---	---	---

## GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3J2332	10/23/2023	10/24/2023	Ua
1,3,5-Trimethylbenzene	0.0101	0.00200	"	"	"	"	"	
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	6.13	0.200	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130	"	"	"
Surrogate: Toluene-d8	110 %	70-130	"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-B01@5'

10/23/2023 10:45:00AM

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

Origins Laboratory, Inc.  
Y310611-01 (Soil)

## GBTEX+TMBs by 8260D

Surrogate: 4-Bromofluorobenzene	92.4 %	70-130	B3J23 32	10/23/2023	10/24/2023
---------------------------------	--------	--------	-------------	------------	------------

## Metals by Saturated Paste by EPA 6010

Calcium	2.60	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	1.11	0.823	"	"	"	"	"
Sodium	2.01	0.435	"	"	"	"	"

## PAH by EPA 8270E

1-Methylnaphthalene	0.285	0.002	mg/kg	1	B3J2325	10/23/2023	10/24/2023
2-Methylnaphthalene	0.397	0.002	"	"	"	"	"
Acenaphthene	0.067	0.020	"	"	"	"	"
Anthracene	ND	0.020	"	"	"	"	" Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	" Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	" Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	" Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	" Ua
Chrysene	ND	0.020	"	"	"	"	" Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	" Ua
Fluoranthene	ND	0.020	"	"	"	"	" Ua
Fluorene	0.069	0.020	"	"	"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-B01@5'

10/23/2023 10:45:00AM

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

**Origins Laboratory, Inc.**  
**Y310611-01 (Soil)**

**PAH by EPA 8270E**

Indeno (1,2,3-cd) pyrene	ND	0.020	mg/kg	1	B3J2325	10/23/2023	10/24/2023	Ua
Naphthalene	0.039	0.002	"	"	"	"	"	
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	100 %	60-130	"	"	"
Surrogate: Anthracene-d10	102 %	60-130	"	"	"
Surrogate: Pyrene-d10	82.2 %	60-130	"	"	"
Surrogate: Benzo (a) pyrene-d12	100 %	60-130	"	"	"

**pH in Soil by 9045D**

pH	7.86	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	1.47	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.635	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

**Table 915 metals by EPA 6020B**

Arsenic	1.86	0.0906	mg/kg	10	B3J2335	10/23/2023	10/26/2023
---------	------	--------	-------	----	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-B01@5'

10/23/2023 10:45:00AM

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

Origins Laboratory, Inc.  
Y310611-01 (Soil)

## Table 915 metals by EPA 6020B

Barium	57.6	9.06	mg/kg	10	B3J2335	10/23/2023	10/26/2023
Cadmium	0.143	0.0906	"	"	"	"	"
Copper	ND	9.06	"	"	"	"	"
Lead	12.8	9.06	"	"	"	"	"
Nickel	ND	9.06	"	"	"	"	"
Selenium	0.163	0.0906	"	"	"	"	"
Silver	ND	0.0906	"	"	"	"	"
Zinc	ND	90.6	"	"	"	"	"

## Total Metals by 7196A

Hexavalent Chromium	ND	0.121	0.303	mg/kg dry	1	2513662	10/25/2023	10/25/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-W01@2.5'

10/23/2023 10:55:00AM

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

Origins Laboratory, Inc.  
Y310611-02 (Soil)

## Boron (DTPA Sorbitol)

Boron	2.60	0.101	mg/L	1	B3J2410	10/24/2023	10/25/2023
-------	------	-------	------	---	---------	------------	------------

## DRO/ORO by EPA 8015D

Diesel (C10-C28)	3420	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023
Residual Range Organics (C28-C40)	1340	100	"	"	"	"	"

Surrogate: o-Terphenyl	119 %	50-150	"	"	"
------------------------	-------	--------	---	---	---

## GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	17.2	0.500	mg/kg	250	B3J2332	10/23/2023	10/24/2023
1,3,5-Trimethylbenzene	8.13	0.0500	"	25	"	"	10/24/2023
Benzene	0.0570	0.0500	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	" R-05, Ua
Toluene	ND	0.0500	"	"	"	"	" R-05, Ua
Xylenes, total	27.6	0.0500	"	"	"	"	"
Gasoline Range Hydrocarbons	1770	50.0	"	250	"	"	10/24/2023

Surrogate: 1,2-Dichloroethane-d4	94.1 %	70-130	"	"	10/24/2023
Surrogate: Toluene-d8	124 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	94.9 %	70-130	"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-W01@2.5'

10/23/2023 10:55:00AM

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

**Origins Laboratory, Inc.**  
**Y310611-02 (Soil)**

**Metals by Saturated Paste by EPA 6010**

Calcium	0.794	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	19.6	0.435	"	"	"	"	"

**PAH by EPA 8270E**

1-Methylnaphthalene	3.55	0.020	mg/kg	10	B3J2325	10/23/2023	10/24/2023
2-Methylnaphthalene	6.92	0.020	"	"	"	"	"
Acenaphthene	0.534	0.020	"	1	"	"	10/24/2023
Anthracene	0.070	0.020	"	"	"	"	"
Benzo (a) anthracene	ND	0.010	"	2	"	"	10/24/2023 Ua
Benzo (a) pyrene	0.059	0.040	"	"	"	"	"
Benzo (b) fluoranthene	ND	0.040	"	"	"	"	" Ua
Benzo (k) fluoranthene	ND	0.040	"	"	"	"	" Ua
Chrysene	0.049	0.040	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.040	"	"	"	"	" Ua
Fluoranthene	ND	0.020	"	1	"	"	10/24/2023 Ua
Fluorene	0.682	0.020	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.040	"	2	"	"	10/24/2023 Ua
Naphthalene	1.60	0.020	"	10	"	"	10/24/2023
Pyrene	ND	0.040	"	2	"	"	10/24/2023 Ua
Surrogate: Fluorene-d10	75.3 %	60-130			"	"	10/24/2023
Surrogate: Anthracene-d10	106 %	60-130			"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-W01@2.5'

10/23/2023 10:55:00AM

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

Origins Laboratory, Inc.  
Y310611-02 (Soil)

## PAH by EPA 8270E

Surrogate: Pyrene-d10	79.6 %	60-130	B3J2325	10/23/2023	10/24/2023
Surrogate: Benzo (a) pyrene-d12	87.6 %	60-130	"	"	"

## pH in Soil by 9045D

pH	7.61	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

## SAR by 20B Saturated Paste

SAR	28.5	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	------	--------	-----	---	---------	------------	------------

## Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.83	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	------	---------	----------	---	---------	------------	------------

## Table 915 metals by EPA 6020B

Arsenic	1.67	0.0945	mg/kg	10	B3J2335	10/23/2023	10/26/2023
Barium	62.7	9.45	"	"	"	"	"
Cadmium	0.153	0.0945	"	"	"	"	"
Copper	ND	9.45	"	"	"	"	"
Lead	10.4	9.45	"	"	"	"	"
Nickel	ND	9.45	"	"	"	"	"
Selenium	0.113	0.0945	"	"	"	"	"
Silver	ND	0.0945	"	"	"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

PWV-W01@2.5'

10/23/2023 10:55:00AM

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

Origins Laboratory, Inc.

Y310611-02 (Soil)

## Table 915 metals by EPA 6020B

Zinc	ND		94.5	mg/kg	10	B3J2335	10/23/2023	10/26/2023	
------	----	--	------	-------	----	---------	------------	------------	--

## Total Metals by 7196A

Hexavalent Chromium	ND	0.114	0.284	mg/kg dry	1	2513662	10/25/2023	10/25/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST01@0.5'

10/23/2023 11:05:00AM

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

**Origins Laboratory, Inc.**  
**Y310611-03 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	ND	0.100	mg/L	1	B3J2410	10/24/2023	10/25/2023	
-------	----	-------	------	---	---------	------------	------------	--

**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023	Ua
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	100 %	50-150			"	"	"	
------------------------	-------	--------	--	--	---	---	---	--

**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3J2332	10/23/2023	10/24/2023	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua

Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130			"	"	"	
----------------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST01@0.5'

10/23/2023 11:05:00AM

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

**Origins Laboratory, Inc.**  
**Y310611-03 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: Toluene-d8	101 %	70-130	B3J2332	10/23/2023	10/24/2023
Surrogate: 4-Bromofluorobenzene	95.2 %	70-130	"	"	"

**Metals by Saturated Paste by EPA 6010**

Calcium	7.46	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	3.26	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

**PAH by EPA 8270E**

1-Methylnaphthalene	ND	0.002	mg/kg	1	B3J2325	10/23/2023	10/24/2023	Ua
2-Methylnaphthalene	ND	0.002	"	"	"	"	"	Ua
Acenaphthene	ND	0.020	"	"	"	"	"	Ua
Anthracene	ND	0.020	"	"	"	"	"	Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	"	Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	"	Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	"	Ua
Chrysene	ND	0.020	"	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	"	Ua
Fluoranthene	ND	0.020	"	"	"	"	"	Ua

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST01@0.5'  
10/23/2023 11:05:00AM

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

Origins Laboratory, Inc.  
Y310611-03 (Soil)

## PAH by EPA 8270E

Fluorene	ND	0.020	mg/kg	1	B3J2325	10/23/2023	10/24/2023	Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	"	"	Ua
Naphthalene	ND	0.002	"	"	"	"	"	Ua
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	100 %	60-130	"	"	"
Surrogate: Anthracene-d10	96.6 %	60-130	"	"	"
Surrogate: Pyrene-d10	83.5 %	60-130	"	"	"
Surrogate: Benzo (a) pyrene-d12	100 %	60-130	"	"	"

## pH in Soil by 9045D

pH	4.45	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

## SAR by 20B Saturated Paste

SAR	0.123	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

## Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.32	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	------	---------	----------	---	---------	------------	------------

## Table 915 metals by EPA 6020B

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST01@0.5'

10/23/2023 11:05:00AM

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

Origins Laboratory, Inc.  
Y310611-03 (Soil)

## Table 915 metals by EPA 6020B

Arsenic	1.75	0.0846	mg/kg	10	B3J2335	10/23/2023	10/26/2023
Barium	36.0	8.46	"	"	"	"	"
Cadmium	ND	0.0846	"	"	"	"	"
Copper	ND	8.46	"	"	"	"	"
Lead	ND	8.46	"	"	"	"	"
Nickel	ND	8.46	"	"	"	"	"
Selenium	ND	0.0846	"	"	"	"	"
Silver	ND	0.0846	"	"	"	"	"
Zinc	ND	84.6	"	"	"	"	"

## Total Metals by 7196A

Hexavalent Chromium	ND	0.102	0.254	mg/kg dry	1	2513662	10/25/2023	10/25/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST02@0.5'  
10/23/2023 11:10:00AM

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

**Origins Laboratory, Inc.**  
**Y310611-04 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	ND	0.0991	mg/L	1	B3J2410	10/24/2023	10/25/2023	
-------	----	--------	------	---	---------	------------	------------	--

**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023	Ua
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	99.0 %	50-150			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3J2332	10/23/2023	10/24/2023	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua

Surrogate: 1,2-Dichloroethane-d4	96.4 %	70-130			"	"	"	
----------------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST02@0.5'

10/23/2023 11:10:00AM

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

Origins Laboratory, Inc.  
Y310611-04 (Soil)

## GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	102 %	70-130	B3J2332	10/23/2023	10/24/2023
Surrogate: 4-Bromofluorobenzene	94.4 %	70-130	"	"	"

## Metals by Saturated Paste by EPA 6010

Calcium	ND	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

## PAH by EPA 8270E

1-Methylnaphthalene	0.009	0.002	mg/kg	1	B3J2325	10/23/2023	10/24/2023
2-Methylnaphthalene	0.023	0.002	"	"	"	"	"
Acenaphthene	ND	0.020	"	"	"	"	Ua
Anthracene	ND	0.020	"	"	"	"	Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	Ua
Chrysene	ND	0.020	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	Ua
Fluoranthene	ND	0.020	"	"	"	"	Ua

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## AST02@0.5'

10/23/2023 11:10:00AM

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

## Origins Laboratory, Inc. Y310611-04 (Soil)

### PAH by EPA 8270E

Fluorene	ND	0.020	mg/kg	1	B3J2325	10/23/2023	10/24/2023	Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	"	"	Ua
Naphthalene	ND	0.002	"	"	"	"	"	Ua
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	97.5 %	60-130	"	"	"
Surrogate: Anthracene-d10	99.6 %	60-130	"	"	"
Surrogate: Pyrene-d10	114 %	60-130	"	"	"
Surrogate: Benzo (a) pyrene-d12	101 %	60-130	"	"	"

### pH in Soil by 9045D

pH	5.49	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

### SAR by 20B Saturated Paste

SAR	0.395	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

### Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.0807	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	--------	---------	----------	---	---------	------------	------------

### Table 915 metals by EPA 6020B

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

AST02@0.5'

10/23/2023 11:10:00AM

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

Origins Laboratory, Inc.  
Y310611-04 (Soil)

## Table 915 metals by EPA 6020B

Arsenic	1.77	0.0909	mg/kg	10	B3J2335	10/23/2023	10/26/2023
Barium	45.0	9.09	"	"	"	"	"
Cadmium	0.103	0.0909	"	"	"	"	"
Copper	ND	9.09	"	"	"	"	"
Lead	ND	9.09	"	"	"	"	"
Nickel	ND	9.09	"	"	"	"	"
Selenium	ND	0.0909	"	"	"	"	"
Silver	ND	0.0909	"	"	"	"	"
Zinc	ND	90.9	"	"	"	"	"

## Total Metals by 7196A

Hexavalent Chromium	ND	0.139	0.347	mg/kg dry	1	2513662	10/25/2023	10/25/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**SEP01-OUTLET@4'**  
**10/23/2023 12:00:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-05 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.760	0.0999	mg/L	1	B3J2410	10/24/2023	10/25/2023	
-------	-------	--------	------	---	---------	------------	------------	--

**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023	Ua
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	93.7 %	50-150	"	"	"	"	"	
------------------------	--------	--------	---	---	---	---	---	--

**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3J2332	10/23/2023	10/24/2023	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Naphthalene	ND	0.00380	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**SEP01-OUTLET@4'**  
**10/23/2023 12:00:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-05 (Soil)**

**GBTEX+TMBs by 8260D**

Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130	B3J2332	10/23/2023	10/24/2023
Surrogate: Toluene-d8	101 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	94.7 %	70-130	"	"	"

**Metals by Saturated Paste by EPA 6010**

Calcium	1.63	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	1.11	0.823	"	"	"	"	"
Sodium	2.86	0.435	"	"	"	"	"

**pH in Soil by 9045D**

pH	8.13	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	2.45	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.634	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**SEP01-INLET@4'**  
**10/23/2023 12:10:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-06 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	ND	0.0991	mg/L	1	B3J2410	10/24/2023	10/25/2023	
-------	----	--------	------	---	---------	------------	------------	--

**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023	Ua
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	101 %	50-150			"	"	"	
------------------------	-------	--------	--	--	---	---	---	--

**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3J2332	10/23/2023	10/24/2023	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Naphthalene	ND	0.00380	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	Ua

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## SEP01-INLET@4'

10/23/2023 12:10:00PM

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

## Origins Laboratory, Inc.

Y310611-06 (Soil)

### GBTEX+TMBs by 8260D

Surrogate: 1,2-Dichloroethane-d4	97.7 %	70-130	B3J2332	10/23/2023	10/24/2023
Surrogate: Toluene-d8	101 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	93.0 %	70-130	"	"	"

### Metals by Saturated Paste by EPA 6010

Calcium	1.68	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

### pH in Soil by 9045D

pH	8.07	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

### SAR by 20B Saturated Paste

SAR	0.164	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

### Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.287	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

FL01@4'

10/23/2023 1:35:00PM

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

**Origins Laboratory, Inc.**  
**Y310611-07 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.304	0.0983	mg/L	1	B3J2411	10/24/2023	10/25/2023	
-------	-------	--------	------	---	---------	------------	------------	--

**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	34.2	25.0	mg/kg	1	B3J2302	10/23/2023	10/23/2023	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	102 %	50-150	"	"	"	"	"	
------------------------	-------	--------	---	---	---	---	---	--

**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3J2332	10/23/2023	10/24/2023	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Benzene	ND	0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	"	"	Ua
Toluene	ND	0.00200	"	"	"	"	"	Ua
Xylenes, total	ND	0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	0.639	0.200	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130	"	"	"	"	"	
Surrogate: Toluene-d8	103 %	70-130	"	"	"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

FL01@4'

10/23/2023 1:35:00PM

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

Origins Laboratory, Inc.  
Y310611-07 (Soil)

## GBTEX+TMBs by 8260D

Surrogate: 4-Bromofluorobenzene	94.3 %	70-130	B3J23 32	10/23/2023	10/24/2023
---------------------------------	--------	--------	-------------	------------	------------

## Metals by Saturated Paste by EPA 6010

Calcium	1.07	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	0.927	0.823	"	"	"	"	"
Sodium	4.13	0.435	"	"	"	"	"

## PAH by EPA 8270E

1-Methylnaphthalene	0.024	0.002	mg/kg	1	B3J2325	10/23/2023	10/24/2023
2-Methylnaphthalene	0.053	0.002	"	"	"	"	"
Acenaphthene	ND	0.020	"	"	"	"	" Ua
Anthracene	ND	0.020	"	"	"	"	" Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	" Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	" Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	" Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	" Ua
Chrysene	ND	0.020	"	"	"	"	" Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	" Ua
Fluoranthene	ND	0.020	"	"	"	"	" Ua
Fluorene	ND	0.020	"	"	"	"	" Ua

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

FL01@4'

10/23/2023 1:35:00PM

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

**Origins Laboratory, Inc.**  
**Y310611-07 (Soil)**

**PAH by EPA 8270E**

Indeno (1,2,3-cd) pyrene	ND	0.020	mg/kg	1	B3J2325	10/23/2023	10/24/2023	Ua
Naphthalene	0.012	0.002	"	"	"	"	"	
Pyrene	ND	0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	97.3 %	60-130	"	"	"
Surrogate: Anthracene-d10	99.1 %	60-130	"	"	"
Surrogate: Pyrene-d10	116 %	60-130	"	"	"
Surrogate: Benzo (a) pyrene-d12	99.1 %	60-130	"	"	"

**pH in Soil by 9045D**

pH	8.04	pH Units	1	B3J2421	10/24/2023	10/25/2023
----	------	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	4.14	0.0100	SAR	1	B3J2416	10/24/2023	10/25/2023
-----	------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.770	0.00500	mmhos/cm	1	B3J2421	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

**Table 915 metals by EPA 6020B**

Arsenic	1.96	0.0893	mg/kg	10	B3J2335	10/23/2023	10/26/2023
---------	------	--------	-------	----	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

FL01@4'

10/23/2023 1:35:00PM

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

**Origins Laboratory, Inc.**  
**Y310611-07 (Soil)**

**Table 915 metals by EPA 6020B**

Barium	59.5	8.93	mg/kg	10	B3J2335	10/23/2023	10/26/2023
Cadmium	0.120	0.0893	"	"	"	"	"
Copper	ND	8.93	"	"	"	"	"
Lead	10.3	8.93	"	"	"	"	"
Nickel	ND	8.93	"	"	"	"	"
Selenium	ND	0.0893	"	"	"	"	"
Silver	ND	0.0893	"	"	"	"	"
Zinc	ND	89.3	"	"	"	"	"

**Total Metals by 7196A**

Hexavalent Chromium	ND	0.143	0.357	mg/kg dry	1	2513662	10/25/2023	10/25/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**TB-BG01@0.5'**  
**10/23/2023 11:15:00AM**

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

**Origins Laboratory, Inc.**  
**Y310611-08 (Soil)**

## Boron (DTPA Sorbitol)

Boron	ND	0.100	mg/L	1	B3J2411	10/24/2023	10/25/2023
-------	----	-------	------	---	---------	------------	------------

## Metals by Saturated Paste by EPA 6010

Calcium	0.647	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

## pH in Soil by 9045D

pH	7.85		pH Units	1	B3J2422	10/24/2023	10/25/2023
----	------	--	----------	---	---------	------------	------------

## SAR by 20B Saturated Paste

SAR	0.159	0.0100	SAR	1	B3J2417	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

## Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.125	0.00500	mmhos/cm	1	B3J2422	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

## Table 915 metals by EPA 6020B

Arsenic	2.05	0.0875	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Barium	47.6	8.75	"	"	"	"	"
Cadmium	ND	0.0875	"	"	"	"	"

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**TB-BG01@0.5'**  
**10/23/2023 11:15:00AM**

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

**Origins Laboratory, Inc.**  
**Y310611-08 (Soil)**

### Table 915 metals by EPA 6020B

Copper	ND	8.75	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Lead	ND	8.75	"	"	"	"	"
Nickel	ND	8.75	"	"	"	"	"
Selenium	0.0927	0.0875	"	"	"	"	"
Silver	ND	0.0875	"	"	"	"	"
Zinc	ND	87.5	"	"	"	"	"

### Total Metals by 7196A

Hexavalent Chromium	ND	0.118	0.296	mg/kg dry	1	2516045	10/28/2023	11/03/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG01@3'**  
**10/23/2023 12:30:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-09 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	ND	0.0986	mg/L	1	B3J2411	10/24/2023	10/25/2023
-------	----	--------	------	---	---------	------------	------------

**Metals by Saturated Paste by EPA 6010**

Calcium	1.67	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	0.478	0.435	"	"	"	"	"

**pH in Soil by 9045D**

pH	8.24		pH Units	1	B3J2422	10/24/2023	10/25/2023
----	------	--	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	0.455	0.0100	SAR	1	B3J2417	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.292	0.00500	mmhos/cm	1	B3J2422	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

**Table 915 metals by EPA 6020B**

Arsenic	1.60	0.0914	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Barium	49.1	9.14	"	"	"	"	"
Cadmium	ND	0.0914	"	"	"	"	"

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG01@3'**  
**10/23/2023 12:30:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-09 (Soil)**

**Table 915 metals by EPA 6020B**

Copper	ND	9.14	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Lead	ND	9.14	"	"	"	"	"
Nickel	ND	9.14	"	"	"	"	"
Selenium	ND	0.0914	"	"	"	"	"
Silver	ND	0.0914	"	"	"	"	"
Zinc	ND	91.4	"	"	"	"	"

**Total Metals by 7196A**

Hexavalent Chromium	ND	0.107	0.268	mg/kg dry	1	2516045	10/28/2023	11/03/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG01@6'**  
**10/23/2023 12:40:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-10 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.114	0.0995	mg/L	1	B3J2411	10/24/2023	10/25/2023
-------	-------	--------	------	---	---------	------------	------------

**Metals by Saturated Paste by EPA 6010**

Calcium	1.81	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	0.570	0.435	"	"	"	"	"

**pH in Soil by 9045D**

pH	8.19		pH Units	1	B3J2422	10/24/2023	10/25/2023
----	------	--	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	0.535	0.0100	SAR	1	B3J2417	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.318	0.00500	mmhos/cm	1	B3J2422	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

**Table 915 metals by EPA 6020B**

Arsenic	1.46	0.0914	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Barium	22.0	9.14	"	"	"	"	"
Cadmium	ND	0.0914	"	"	"	"	"
Copper	ND	9.14	"	"	"	"	"

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG01@6'**  
**10/23/2023 12:40:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-10 (Soil)**

### Table 915 metals by EPA 6020B

Lead	ND	9.14	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Nickel	ND	9.14	"	"	"	"	"
Selenium	ND	0.0914	"	"	"	"	"
Silver	ND	0.0914	"	"	"	"	"
Zinc	ND	91.4	"	"	"	"	"

### Total Metals by 7196A

Hexavalent Chromium	ND	0.112	0.281	mg/kg dry	1	2516045	10/28/2023	11/03/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG02@3'**  
**10/23/2023 12:45:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-11 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	ND	0.100	mg/L	1	B3J2411	10/24/2023	10/25/2023
-------	----	-------	------	---	---------	------------	------------

**Metals by Saturated Paste by EPA 6010**

Calcium	ND	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

**pH in Soil by 9045D**

pH	7.22		pH Units	1	B3J2422	10/24/2023	10/25/2023
----	------	--	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	0.481	0.0100	SAR	1	B3J2417	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.116	0.00500	mmhos/cm	1	B3J2422	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

**Table 915 metals by EPA 6020B**

Arsenic	0.661	0.0925	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Barium	10.1	9.25	"	"	"	"	"
Cadmium	ND	0.0925	"	"	"	"	"

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG02@3'**  
**10/23/2023 12:45:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-11 (Soil)**

**Table 915 metals by EPA 6020B**

Copper	ND	9.25	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Lead	ND	9.25	"	"	"	"	"
Nickel	ND	9.25	"	"	"	"	"
Selenium	ND	0.0925	"	"	"	"	"
Silver	ND	0.0925	"	"	"	"	"
Zinc	ND	92.5	"	"	"	"	"

**Total Metals by 7196A**

Hexavalent Chromium	ND	0.134	0.335	mg/kg dry	1	2516045	10/28/2023	11/03/2023	U
---------------------	----	-------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG02@6'**  
**10/23/2023 12:50:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-12 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	ND	0.101	mg/L	1	B3J2411	10/24/2023	10/25/2023
-------	----	-------	------	---	---------	------------	------------

**Metals by Saturated Paste by EPA 6010**

Calcium	ND	0.499	meq/L	10	[CALC]	10/24/2023	10/25/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	ND	0.435	"	"	"	"	"

**pH in Soil by 9045D**

pH	7.18		pH Units	1	B3J2422	10/24/2023	10/25/2023
----	------	--	----------	---	---------	------------	------------

**SAR by 20B Saturated Paste**

SAR	0.550	0.0100	SAR	1	B3J2417	10/24/2023	10/25/2023
-----	-------	--------	-----	---	---------	------------	------------

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.129	0.00500	mmhos/cm	1	B3J2422	10/24/2023	10/25/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

**Table 915 metals by EPA 6020B**

Arsenic	1.83	0.0835	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Barium	26.1	8.35	"	"	"	"	"
Cadmium	ND	0.0835	"	"	"	"	"

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**NATIVE-BG02@6'**  
**10/23/2023 12:50:00PM**

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

**Origins Laboratory, Inc.**  
**Y310611-12 (Soil)**

**Table 915 metals by EPA 6020B**

Copper	ND	8.35	mg/kg	10	B3J2443	10/24/2023	10/27/2023
Lead	ND	8.35	"	"	"	"	"
Nickel	ND	8.35	"	"	"	"	"
Selenium	ND	0.0835	"	"	"	"	"
Silver	ND	0.0835	"	"	"	"	"
Zinc	ND	83.5	"	"	"	"	"

**Total Metals by 7196A**

Hexavalent Chromium	ND	0.0933	0.233	mg/kg dry	1	2516045	10/28/2023	11/03/2023	U
---------------------	----	--------	-------	-----------	---	---------	------------	------------	---

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3J2302 - EPA 3550B										
Blank (B3J2302-BLK1)					Prepared: 10/23/2023 Analyzed: 10/23/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							Ua
Residual Range Organics (C28-C40)	ND	100	"							Ua
Surrogate: o-Terphenyl	25		"	24.9		102	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

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

Batch B3J2302 - EPA 3550B

### LCS (B3J2302-BS1)

Prepared: 10/23/2023 Analyzed: 10/23/2023

Diesel (C10-C28)	1020	50.0	mg/kg	1000		102	70-130			
Residual Range Organics (C28-C40)	861	200	"	1000		86.1	70-130			
Surrogate: o-Terphenyl	50		"	49.8		101	50-150			

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

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

### Batch B3J2302 - EPA 3550B

Matrix Spike (B3J2302-MS1)		Source: Y310604-01			Prepared: 10/23/2023 Analyzed: 10/23/2023					
Diesel (C10-C28)	937	50.0	mg/kg	1000	ND	93.7	70-130			
Residual Range Organics (C28-C40)	827	200	"	1000	ND	82.7	70-130			
Surrogate: o-Terphenyl	50		"	49.8		100	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3J2302 - EPA 3550B										
Matrix Spike Dup (B3J2302-MSD1)		Source: Y310604-01			Prepared: 10/23/2023 Analyzed: 10/23/2023					
Diesel (C10-C28)	953	50.0	mg/kg	1000	ND	95.3	70-130	1.71	35	
Residual Range Organics (C28-C40)	841	200	"	1000	ND	84.1	70-130	1.60	35	
Surrogate: o-Terphenyl	50		"	49.8		99.6	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3J2332 - EPA 5030 (soil)										
Blank (B3J2332-BLK1)					Prepared: 10/23/2023 Analyzed: 10/23/2023					
1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							Ua
1,3,5-Trimethylbenzene	ND	0.00200	"							Ua
Benzene	ND	0.00200	"							Ua
Ethylbenzene	ND	0.00200	"							Ua
Naphthalene	ND	0.00380	"							Ua
Toluene	ND	0.00200	"							Ua
Xylenes, total	ND	0.00200	"							Ua
Gasoline Range Hydrocarbons	ND	0.200	"							Ua
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		99.3	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		94.8	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B3J2332 - EPA 5030 (soil)</b>										
<b>LCS (B3J2332-BS1)</b>					Prepared: 10/23/2023 Analyzed: 10/23/2023					
1,2,4-Trimethylbenzene	0.0995	0.00200	mg/kg	0.100		99.5	70-130			
1,3,5-Trimethylbenzene	0.0968	0.00200	"	0.100		96.8	70-130			
Benzene	0.0914	0.00200	"	0.100		91.4	70-130			
Ethylbenzene	0.101	0.00200	"	0.100		101	70-130			
Naphthalene	0.108	0.00380	"	0.100		108	70-130			
Toluene	0.0936	0.00200	"	0.100		93.6	70-130			
o-Xylene	0.0996	0.00200	"	0.100		99.6	70-130			
m,p-Xylene	0.196	0.00400	"	0.200		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		95.1	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B3J2332 - EPA 5030 (soil)</b>										
<b>Matrix Spike (B3J2332-MS1)</b>		<b>Source: Y310604-01</b>			Prepared: 10/23/2023 Analyzed: 10/23/2023					
1,2,4-Trimethylbenzene	0.0914	0.00200	mg/kg	0.100	ND	91.4	70-130			
1,3,5-Trimethylbenzene	0.0901	0.00200	"	0.100	ND	90.1	70-130			
Benzene	0.0815	0.00200	"	0.100	ND	81.5	70-130			
Ethylbenzene	0.0924	0.00200	"	0.100	ND	92.4	70-130			
Naphthalene	0.0957	0.00380	"	0.100	ND	95.7	70-130			
Toluene	0.0852	0.00200	"	0.100	ND	85.2	70-130			
o-Xylene	0.0920	0.00200	"	0.100	ND	92.0	70-130			
m,p-Xylene	0.181	0.00400	"	0.200	ND	90.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		94.4	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B3J2332 - EPA 5030 (soil)</b>										
<b>Matrix Spike Dup (B3J2332-MSD1)</b>	<b>Source: Y310604-01</b>				Prepared: 10/23/2023 Analyzed: 10/23/2023					
1,2,4-Trimethylbenzene	0.0991	0.00200	mg/kg	0.100	ND	99.1	70-130	8.17	20	
1,3,5-Trimethylbenzene	0.0971	0.00200	"	0.100	ND	97.1	70-130	7.44	20	
Benzene	0.0899	0.00200	"	0.100	ND	89.9	70-130	9.85	20	
Ethylbenzene	0.101	0.00200	"	0.100	ND	101	70-130	9.23	20	
Naphthalene	0.105	0.00380	"	0.100	ND	105	70-130	9.44	20	
Toluene	0.0924	0.00200	"	0.100	ND	92.4	70-130	8.11	20	
o-Xylene	0.100	0.00200	"	0.100	ND	100	70-130	8.43	20	
m,p-Xylene	0.198	0.00400	"	0.200	ND	98.8	70-130	8.67	20	
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		95.2	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		104	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

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

**Metals by EPA 6000/7000 Series Methods - Quality Control**  
**Origins Laboratory, Inc.**

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

**Batch B3J2335 - EPA 3050B**

**Blank (B3J2335-BLK1)**

Prepared: 10/23/2023 Analyzed: 10/26/2023

Arsenic	ND	0.000100	mg/kg
Barium	ND	0.0100	"
Cadmium	ND	0.000100	"
Copper	ND	0.0100	"
Lead	ND	0.0100	"
Nickel	ND	0.0100	"
Selenium	ND	0.000100	"
Silver	ND	0.000100	"
Zinc	ND	0.100	"

**LCS (B3J2335-BS1)**

Prepared: 10/23/2023 Analyzed: 10/26/2023

Arsenic	0.0536	0.000100	mg/kg	0.0500	107	80-120
Barium	5.11	0.0100	"	5.00	102	80-120
Cadmium	0.0525	0.000100	"	0.0500	105	80-120
Copper	0.509	0.0100	"	0.500	102	80-120
Lead	0.0516	0.0100	"	0.0500	103	80-120
Nickel	0.0544	0.0100	"	0.0500	109	80-120
Selenium	0.0522	0.000100	"	0.0500	104	80-120
Silver	0.0536	0.000100	"	0.0500	107	80-120
Zinc	0.485	0.100	"	0.500	97.1	80-120

**Matrix Spike (B3J2335-MS1)**

**Source: Y310604-01**

Prepared: 10/23/2023 Analyzed: 10/26/2023

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Metals by EPA 6000/7000 Series Methods - Quality Control**  
**Origins Laboratory, Inc.**

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

**Batch B3J2335 - EPA 3050B**

Matrix Spike (B3J2335-MS1)		Source: Y310604-01			Prepared: 10/23/2023 Analyzed: 10/26/2023					
Arsenic	6.33	0.0870	mg/kg	4.35	1.63	108	75-125			
Barium	495	8.70	"	435	44.5	104	75-125			
Cadmium	4.75	0.0870	"	4.35	0.0772	107	75-125			
Copper	46.2	8.70	"	43.5	3.57	98.0	75-125			
Lead	9.23	8.70	"	4.35	4.38	111	75-125			
Nickel	9.35	8.70	"	4.35	3.78	128	75-125			QM-07
Selenium	3.87	0.0870	"	4.35	ND	88.9	75-125			
Silver	4.76	0.0870	"	4.35	0.0186	109	75-125			
Zinc	60.9	87.0	"	43.5	16.8	102	75-125			

Matrix Spike Dup (B3J2335-MSD1)		Source: Y310604-01			Prepared: 10/23/2023 Analyzed: 10/26/2023					
Arsenic	6.68	0.0940	mg/kg	4.70	1.63	108	75-125	5.51	20	
Barium	526	9.40	"	470	44.5	102	75-125	6.04	20	
Cadmium	5.02	0.0940	"	4.70	0.0772	105	75-125	5.51	20	
Copper	49.1	9.40	"	47.0	3.57	96.8	75-125	6.05	20	
Lead	10.1	9.40	"	4.70	4.38	121	75-125	8.62	20	
Nickel	8.79	9.40	"	4.70	3.78	106	75-125	6.27	20	
Selenium	4.27	0.0940	"	4.70	ND	90.8	75-125	9.88	20	
Silver	5.08	0.0940	"	4.70	0.0186	108	75-125	6.56	20	
Zinc	64.9	94.0	"	47.0	16.8	102	75-125	6.33	20	

**Batch B3J2443 - EPA 3050B**

Blank (B3J2443-BLK1)		Prepared: 10/24/2023 Analyzed: 10/27/2023								
Arsenic	ND	0.000100	mg/kg							
Barium	ND	0.0100	"							
Cadmium	ND	0.000100	"							

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Metals by EPA 6000/7000 Series Methods - Quality Control**  
**Origins Laboratory, Inc.**

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

**Batch B3J2443 - EPA 3050B**

**Blank (B3J2443-BLK1)**

Prepared: 10/24/2023 Analyzed: 10/27/2023

Copper	ND	0.0100	mg/kg
Lead	ND	0.0100	"
Nickel	ND	0.0100	"
Selenium	ND	0.000100	"
Silver	ND	0.000100	"
Zinc	ND	0.100	"

**LCS (B3J2443-BS1)**

Prepared: 10/24/2023 Analyzed: 10/27/2023

Arsenic	0.0536	0.000100	mg/kg	0.0500	107	80-120
Barium	4.97	0.0100	"	5.00	99.4	80-120
Cadmium	0.0524	0.000100	"	0.0500	105	80-120
Copper	0.503	0.0100	"	0.500	101	80-120
Lead	0.0520	0.0100	"	0.0500	104	80-120
Nickel	0.0492	0.0100	"	0.0500	98.3	80-120
Selenium	0.0476	0.000100	"	0.0500	95.1	80-120
Silver	0.0549	0.000100	"	0.0500	110	80-120
Zinc	0.472	0.100	"	0.500	94.5	80-120

**Matrix Spike (B3J2443-MS1)**

**Source: Y310611-08**

Prepared: 10/24/2023 Analyzed: 10/27/2023

Arsenic	7.19	0.0931	mg/kg	4.65	2.05	110	75-125
Barium	485	9.31	"	465	47.6	93.9	75-125
Cadmium	4.75	0.0931	"	4.65	0.0700	100	75-125
Copper	51.4	9.31	"	46.5	5.99	97.5	75-125
Lead	10.2	9.31	"	4.65	5.67	97.9	75-125
Nickel	9.79	9.31	"	4.65	6.58	68.8	75-125
Selenium	4.14	0.0931	"	4.65	0.0927	86.8	75-125
Silver	4.96	0.0931	"	4.65	0.0385	106	75-125

QM-07

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Metals by EPA 6000/7000 Series Methods - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B3J2443 - EPA 3050B</b>										
<b>Matrix Spike (B3J2443-MS1)</b>		<b>Source: Y310611-08</b>			Prepared: 10/24/2023 Analyzed: 10/27/2023					
Zinc	65.4	93.1	mg/kg	46.5	30.6	74.8	75-125			QM-07
<b>Matrix Spike Dup (B3J2443-MSD1)</b>		<b>Source: Y310611-08</b>			Prepared: 10/24/2023 Analyzed: 10/27/2023					
Arsenic	7.19	0.0929	mg/kg	4.64	2.05	111	75-125	0.00402	20	
Barium	496	9.29	"	464	47.6	96.5	75-125	2.25	20	
Cadmium	4.76	0.0929	"	4.64	0.0700	101	75-125	0.228	20	
Copper	52.9	9.29	"	46.4	5.99	101	75-125	2.90	20	
Lead	10.9	9.29	"	4.64	5.67	113	75-125	6.68	20	
Nickel	12.4	9.29	"	4.64	6.58	126	75-125	23.7	20	QM-07
Selenium	4.22	0.0929	"	4.64	0.0927	88.8	75-125	1.98	20	
Silver	4.88	0.0929	"	4.64	0.0385	104	75-125	1.70	20	
Zinc	75.8	92.9	"	46.4	30.6	97.3	75-125	14.6	20	

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control**  
**Origins Laboratory, Inc.**

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

**Batch B3J2325 - EPA 3580**

**Blank (B3J2325-BLK1)**

Prepared: 10/23/2023 Analyzed: 10/24/2023

1-Methylnaphthalene	ND	0.002	mg/kg							Ua
2-Methylnaphthalene	ND	0.002	"							Ua
Acenaphthene	ND	0.020	"							Ua
Anthracene	ND	0.020	"							Ua
Benzo (a) anthracene	ND	0.005	"							Ua
Benzo (a) pyrene	ND	0.020	"							Ua
Benzo (b) fluoranthene	ND	0.020	"							Ua
Benzo (k) fluoranthene	ND	0.020	"							Ua
Chrysene	ND	0.020	"							Ua
Dibenz (a,h) anthracene	ND	0.020	"							Ua
Fluoranthene	ND	0.020	"							Ua
Fluorene	ND	0.020	"							Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"							Ua
Naphthalene	ND	0.002	"							Ua
Pyrene	ND	0.020	"							Ua

Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130
Surrogate: Anthracene-d10	200		"	200		99.1	60-130
Surrogate: Pyrene-d10	170		"	200		86.8	60-130
Surrogate: Benzo (a) pyrene-d12	200		"	200		98.2	60-130

**LCS (B3J2325-BS1)**

Prepared: 10/23/2023 Analyzed: 10/24/2023

1-Methylnaphthalene	0.210	0.002	mg/kg	0.200		105	70-130
2-Methylnaphthalene	0.209	0.002	"	0.200		105	70-130
Acenaphthene	0.210	0.020	"	0.200		105	70-130
Anthracene	0.202	0.020	"	0.200		101	70-130
Benzo (a) anthracene	0.187	0.005	"	0.200		93.3	70-130
Benzo (a) pyrene	0.219	0.020	"	0.200		109	70-130

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control**  
**Origins Laboratory, Inc.**

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

**Batch B3J2325 - EPA 3580**

**LCS (B3J2325-BS1)**

Prepared: 10/23/2023 Analyzed: 10/24/2023

Benzo (b) fluoranthene	0.216	0.020	mg/kg	0.200		108	70-130
Benzo (k) fluoranthene	0.193	0.020	"	0.200		96.6	70-130
Chrysene	0.206	0.020	"	0.200		103	70-130
Dibenz (a,h) anthracene	0.225	0.020	"	0.200		113	70-130
Fluoranthene	0.229	0.020	"	0.200		115	70-130
Fluorene	0.211	0.020	"	0.200		106	70-130
Indeno (1,2,3-cd) pyrene	0.206	0.020	"	0.200		103	70-130
Naphthalene	0.214	0.002	"	0.200		107	70-130
Pyrene	0.179	0.020	"	0.200		89.3	70-130

Surrogate: Fluorene-d10	200		ug/kg	200		102	60-130
Surrogate: Anthracene-d10	190		"	200		96.8	60-130
Surrogate: Pyrene-d10	170		"	200		84.6	60-130
Surrogate: Benzo (a) pyrene-d12	200		"	200		99.2	60-130

**Matrix Spike (B3J2325-MS1)**

**Source: Y310604-01**

Prepared: 10/23/2023 Analyzed: 10/24/2023

1-Methylnaphthalene	0.225	0.002	mg/kg	0.200	ND	112	70-130
2-Methylnaphthalene	0.220	0.002	"	0.200	ND	110	70-130
Acenaphthene	0.223	0.020	"	0.200	ND	111	70-130
Anthracene	0.206	0.020	"	0.200	ND	103	70-130
Benzo (a) anthracene	0.204	0.005	"	0.200	ND	102	70-130
Benzo (a) pyrene	0.221	0.020	"	0.200	ND	110	70-130
Benzo (b) fluoranthene	0.223	0.020	"	0.200	ND	112	70-130
Benzo (k) fluoranthene	0.192	0.020	"	0.200	ND	95.9	70-130
Chrysene	0.215	0.020	"	0.200	ND	107	70-130
Dibenz (a,h) anthracene	0.233	0.020	"	0.200	ND	117	70-130
Fluoranthene	0.249	0.020	"	0.200	ND	124	70-130
Fluorene	0.223	0.020	"	0.200	ND	112	70-130

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control**  
**Origins Laboratory, Inc.**

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

**Batch B3J2325 - EPA 3580**

Matrix Spike (B3J2325-MS1)		Source: Y310604-01			Prepared: 10/23/2023 Analyzed: 10/24/2023					
Indeno (1,2,3-cd) pyrene	0.213	0.020	mg/kg	0.200	ND	107	70-130			
Naphthalene	0.229	0.002	"	0.200	ND	114	70-130			
Pyrene	0.184	0.020	"	0.200	ND	92.2	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		100	60-130			
Surrogate: Anthracene-d10	200		"	200		99.5	60-130			
Surrogate: Pyrene-d10	170		"	200		82.6	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		99.2	60-130			

Matrix Spike Dup (B3J2325-MSD1)		Source: Y310604-01			Prepared: 10/23/2023 Analyzed: 10/24/2023					
1-Methylnaphthalene	0.225	0.002	mg/kg	0.200	ND	112	70-130	0.159	20	
2-Methylnaphthalene	0.218	0.002	"	0.200	ND	109	70-130	0.982	20	
Acenaphthene	0.222	0.020	"	0.200	ND	111	70-130	0.368	20	
Anthracene	0.196	0.020	"	0.200	ND	97.9	70-130	5.00	20	
Benzo (a) anthracene	0.205	0.005	"	0.200	ND	103	70-130	0.684	20	
Benzo (a) pyrene	0.217	0.020	"	0.200	ND	108	70-130	1.93	20	
Benzo (b) fluoranthene	0.233	0.020	"	0.200	ND	117	70-130	4.26	20	
Benzo (k) fluoranthene	0.221	0.020	"	0.200	ND	111	70-130	14.4	20	
Chrysene	0.216	0.020	"	0.200	ND	108	70-130	0.474	20	
Dibenz (a,h) anthracene	0.241	0.020	"	0.200	ND	120	70-130	3.06	20	
Fluoranthene	0.254	0.020	"	0.200	ND	127	70-130	2.16	20	
Fluorene	0.226	0.020	"	0.200	ND	113	70-130	1.49	20	
Indeno (1,2,3-cd) pyrene	0.219	0.020	"	0.200	ND	110	70-130	2.66	20	
Naphthalene	0.223	0.002	"	0.200	ND	111	70-130	2.55	20	
Pyrene	0.185	0.020	"	0.200	ND	92.6	70-130	0.458	20	
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		99.0	60-130			
Surrogate: Pyrene-d10	160		"	200		81.5	60-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control**  
**Origins Laboratory, Inc.**

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

Batch B3J2325 - EPA 3580

**Matrix Spike Dup (B3J2325-MSD1)**

**Source: Y310604-01**

Prepared: 10/23/2023 Analyzed: 10/24/2023

Surrogate: Benzo (a) pyrene-d12	200	ug/kg	200	101	60-130
---------------------------------	-----	-------	-----	-----	--------

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Classical Chemistry Parameters - Quality Control Origins Laboratory, Inc.

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

### Batch B3J2410 - DTPA Sorbitol Preparation

#### Blank (B3J2410-BLK1)

Prepared: 10/24/2023 Analyzed: 10/25/2023

Boron ND 0.100 mg/L

#### Duplicate (B3J2410-DUP1)

Source: Y310604-01

Prepared: 10/24/2023 Analyzed: 10/25/2023

Boron 0.0356 0.0993 mg/L 0.0338 5.16 50

### Batch B3J2411 - DTPA Sorbitol Preparation

#### Blank (B3J2411-BLK1)

Prepared: 10/24/2023 Analyzed: 10/25/2023

Boron ND 0.100 mg/L

#### Duplicate (B3J2411-DUP1)

Source: Y310611-07

Prepared: 10/24/2023 Analyzed: 10/25/2023

Boron 0.261 0.0985 mg/L 0.304 15.3 50

### Batch B3J2416 - Saturated Paste Metals

#### Blank (B3J2416-BLK1)

Prepared: 10/24/2023 Analyzed: 10/25/2023

SAR ND 0.0100 SAR

Calcium PPM ND 10.0 mg/L

Magnesium PPM ND 10.0 "

Sodium PPM ND 10.0 "

#### Duplicate (B3J2416-DUP1)

Source: Y310605-01

Prepared: 10/24/2023 Analyzed: 10/25/2023

Calcium PPM 502 10.0 mg/L 449 11.1 50

SAR ND 0.0100 SAR 0.141 200

Magnesium PPM 149 10.0 mg/L 134 10.2 50

Sodium PPM 13.4 10.0 " 13.3 0.676 50

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Classical Chemistry Parameters - Quality Control

### Origins Laboratory, Inc.

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

#### Batch B3J2417 - Saturated Paste Metals

##### Blank (B3J2417-BLK1)

Prepared: 10/24/2023 Analyzed: 10/25/2023

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

##### Duplicate (B3J2417-DUP1)

Source: Y310611-08

Prepared: 10/24/2023 Analyzed: 10/25/2023

Calcium PPM	14.5	10.0	mg/L	13.0	10.9	50
SAR	ND	0.0100	SAR	0.159		200
Magnesium PPM	2.98	10.0	mg/L	2.55	15.6	50
Sodium PPM	2.55	10.0	"	2.39	6.48	50

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Saturated Paste - Quality Control Origins Laboratory, Inc.

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

### Batch B3J2421 - Saturated Paste pH/EC

#### Blank (B3J2421-BLK1)

Prepared: 10/24/2023 Analyzed: 10/25/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

#### Duplicate (B3J2421-DUP1)

Source: Y310605-01

Prepared: 10/24/2023 Analyzed: 10/25/2023

Specific Conductance (EC)	5.59	0.00500	mmhos/cm	5.39	3.61	25
pH	5.33		pH Units	5.17	3.05	25

### Batch B3J2422 - Saturated Paste pH/EC

#### Blank (B3J2422-BLK1)

Prepared: 10/24/2023 Analyzed: 10/25/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

#### Duplicate (B3J2422-DUP1)

Source: Y310611-08

Prepared: 10/24/2023 Analyzed: 10/25/2023

pH	7.89		pH Units	7.85	0.508	25
Specific Conductance (EC)	0.138	0.00500	mmhos/cm	0.125	10.1	25

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

## Total Metals by 7196A - Quality Control GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 2513662 - SW846 3060A</b>										
<b>BLANK (1205555862-BLK)</b>					Prepared: 10/25/2023 Analyzed: 10/25/2023					
Hexavalent Chromium	ND	0.303	mg/kg				-			U
<b>LCS (1205555863-BKS)</b>					Prepared: 10/25/2023 Analyzed: 10/25/2023					
Hexavalent Chromium	2.44	0.246	mg/kg	2.46		99.3	80-120			
<b>DUP (1205555866 D)</b>					Source: 642424002 Prepared: 10/25/2023 Analyzed: 10/25/2023					
Hexavalent Chromium	ND	0.314	mg/kg dry		<0.126		0-50	N/A	50	U
<b>MS (1205555867 S)</b>					Source: 642424002 Prepared: 10/25/2023 Analyzed: 10/25/2023					
Hexavalent Chromium	2.31	0.317	mg/kg dry	3.17	<0.127	73	75-125			
<b>ILCS (1205555868-ILCS)</b>					Prepared: 10/25/2023 Analyzed: 10/25/2023					
Hexavalent Chromium	6.23	0.308	mg/kg	6.35		98	80-120			
<b>Batch 2516045 - SW846 3060A</b>										
<b>BLANK (1205559779-BLK)</b>					Prepared: 10/28/2023 Analyzed: 11/03/2023					
Hexavalent Chromium	ND	0.211	mg/kg				-			U
<b>LCS (1205559780-BKS)</b>					Prepared: 10/28/2023 Analyzed: 11/03/2023					
Hexavalent Chromium	3.05	0.307	mg/kg	3.07		99.3	80-120			
<b>DUP (1205559783 D)</b>					Source: Y310611-08 Prepared: 10/28/2023 Analyzed: 11/03/2023					
Hexavalent Chromium	ND	0.296	mg/kg dry		<0.118		0-50	N/A	50	U
<b>MS (1205559784 S)</b>					Source: Y310611-08 Prepared: 10/28/2023 Analyzed: 11/03/2023					
Hexavalent Chromium	2.81	0.296	mg/kg dry	2.96	<0.118	94.9	75-125			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417392

Project: KMG - PSC 15-10 FSV, 24A&4 O SA Facility

**Total Metals by 7196A - Quality Control**  
**GEL Laboratories, LLC**

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

Batch 2516045 - SW846 3060A

**ILCS (1205559785-ILCS)**

Prepared: 10/28/2023 Analyzed: 11/03/2023

Hexavalent Chromium	5.22	0.259	mg/kg	5.46	95.7	80-120
---------------------	------	-------	-------	------	------	--------

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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

Jeremy Espinoza  
Project Number: 09A1417392  
Project: KMG - PSC 15-10 FSV, 24A&4 O SA  
Facility

### Notes and Definitions

Ua Sample is Non-Detect.

U Result not detected above the detection limit

R-05 The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Calculated results may use J-flag data (instead of reported "ND") as part of calculation to provide a more accurate result.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*