



June 15, 2020

Tasman Geosciences

Mike Jahn

6855 West 119th Avenue

Broomfield CO 80020

Project Name - KMG - HSR - Van Schaack 4-33

Project Number - 90200403

Attached are your analytical results for KMG - HSR - Van Schaack 4-33 received by Origins Laboratory, Inc. June 12, 2020. This project is associated with Origins project number Y006238-01.

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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Tasman Geosciences
6855 West 119th Avenue
Broomfield CO 80020

Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01@11.5'	Y006238-01	Soil	June 12, 2020 13:45	06/12/2020 15:15
N01@8.5'	Y006238-02	Soil	June 12, 2020 13:47	06/12/2020 15:15
S01@8.5'	Y006238-03	Soil	June 12, 2020 13:49	06/12/2020 15:15
E01@8.5'	Y006238-04	Soil	June 12, 2020 13:51	06/12/2020 15:15
W01@8.5'	Y006238-05	Soil	June 12, 2020 13:53	06/12/2020 15:15
GW01	Y006238-06	Water	June 12, 2020 13:30	06/12/2020 15:15

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Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

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page 1 of 1

4006238

ORIGINS
LABORATORY, INC

Client: CSH / Tasman
Address:
Telephone Number:
Email Address: m.jahn@tasman-geo.com

Project Manager: Mike Jahn
Project Name: HSR - Van Schaack 4-33
Project Number: 90200403
Samples Collected By: BL

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix		Analysis				Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #	Other	Geochem	Trace	
B01 B11.5'	6-12-20	1345	2	X					X					1
N01 A 8.5'		1347	1											2
S01 A 8.5'		1349	1											3
E01 A 8.5'		1351	1											4
W01 A 8.5'		1353	1											5
G001		1350	1											6
														7
														8
														9
														10

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<u>BL</u>	6-12-20	1515	<u>[Signature]</u>	6-12-20	1515	Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Origins Laboratory, Inc.

Jordan A. Merrill

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Broomfield CO 80020

Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 7006238

Client: Tasman

Client Project ID: KMG-HSR-Van Schaack 4-33

Checklist Completed by: JD

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

Date/time completed: 6-12-20

Airbill #: NA

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

☒ Water ☐ Other: _____

Cooler Number/Temperature: 1 / 15.2 °C 1 °C 1 °C 1 °C

Thermometer ID: 603

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

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

Date/Time Reviewed

Origins Laboratory, Inc.

Jordan A. Merrill

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6855 West 119th Avenue
Broomfield CO 80020

Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

B01@11.5'

6/12/2020 1:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006238-01 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B0F1209	KDK	06/12/2020	06/12/2020	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	KDK	"	"	U

Surrogate: o-Terphenyl 56.6 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	B0F1208	ZZZ	06/12/2020	06/12/2020	U
Benzene	ND	0.050	"	"	"	ZZZ	"	"	U
Toluene	ND	0.050	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	0.050	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.050	"	"	"	ZZZ	"	"	U
Naphthalene	ND	0.200	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4 103 % 70-130 " " "
Surrogate: Toluene-d8 115 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 109 % 70-130 " " "

pH in Soil by EPA 9045D

pH	8.15	pH Units	1	B0F1213	KDK	06/12/2020	06/12/2020
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.142	0.00500	mmhos/cm	"	B0F1214	KDK	"	06/12/2020
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Origins Laboratory, Inc.

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Broomfield CO 80020

Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

N01@8.5'
6/12/2020 1:47:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006238-02 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	115	25.0	mg/kg	1	B0F1209	KDK	06/12/2020	06/12/2020	
Residual Range Organics (C28-C40)	ND	100	"	"	"	KDK	"	"	U

Surrogate: o-Terphenyl 67.6 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	46.3	5.00	mg/kg	25	B0F1208	ZZZ	06/12/2020	06/13/2020	
Benzene	ND	0.050	"	"	"	ZZZ	"	"	U
Toluene	0.128	0.050	"	"	"	ZZZ	"	"	
Ethylbenzene	0.204	0.050	"	"	"	ZZZ	"	"	
Xylenes, total	1.64	0.050	"	"	"	ZZZ	"	"	
Naphthalene	0.270	0.200	"	"	"	ZZZ	"	"	

Surrogate: 1,2-Dichloroethane-d4 99.4 % 70-130 " " "
Surrogate: Toluene-d8 111 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 111 % 70-130 " " "

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Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

S01@8.5'

6/12/2020 1:49:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006238-03 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	61.9	25.0	mg/kg	1	B0F1209	KDK	06/12/2020	06/12/2020	
Residual Range Organics (C28-C40)	ND	100	"	"	"	KDK	"	"	U

Surrogate: o-Terphenyl 67.0 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	10.2	5.00	mg/kg	25	B0F1208	ZZZ	06/12/2020	06/13/2020	
Benzene	0.053	0.050	"	"	"	ZZZ	"	"	
Toluene	ND	0.050	"	"	"	ZZZ	"	"	U
Ethylbenzene	0.823	0.050	"	"	"	ZZZ	"	"	
Xylenes, total	9.08	0.050	"	"	"	ZZZ	"	"	
Naphthalene	0.400	0.200	"	"	"	ZZZ	"	"	

Surrogate: 1,2-Dichloroethane-d4 103 % 70-130 " " "
Surrogate: Toluene-d8 110 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 117 % 70-130 " " "

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Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

E01@8.5'
6/12/2020 1:51:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006238-04 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	124	25.0	mg/kg	1	B0F1209	KDK	06/12/2020	06/12/2020	
Residual Range Organics (C28-C40)	ND	100	"	"	"	KDK	"	"	U

Surrogate: o-Terphenyl 69.6 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	63.2	50.0	mg/kg	250	B0F1208	ZZZ	06/12/2020	06/12/2020	
Benzene	0.096	0.050	"	25	"	ZZZ	"	06/13/2020	
Toluene	ND	0.050	"	"	"	ZZZ	"	"	U
Ethylbenzene	0.592	0.050	"	"	"	ZZZ	"	"	
Xylenes, total	5.94	0.050	"	"	"	ZZZ	"	"	
Naphthalene	0.338	0.200	"	"	"	ZZZ	"	"	

Surrogate: 1,2-Dichloroethane-d4 98.4 % 70-130 " " "
Surrogate: Toluene-d8 115 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 113 % 70-130 " " "

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Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

W01@8.5'

6/12/2020 1:53:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006238-05 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	31.9	25.0	mg/kg	1	B0F1209	KDK	06/12/2020	06/12/2020	
Residual Range Organics (C28-C40)	ND	100	"	"	"	KDK	"	"	U

Surrogate: o-Terphenyl 63.8 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	144	5.00	mg/kg	25	B0F1208	ZZZ	06/12/2020	06/12/2020	
Benzene	0.246	0.050	"	"	"	ZZZ	"	"	
Toluene	ND	0.050	"	"	"	ZZZ	"	"	U
Ethylbenzene	0.661	0.050	"	"	"	ZZZ	"	"	
Xylenes, total	6.50	0.050	"	"	"	ZZZ	"	"	
Naphthalene	0.362	0.200	"	"	"	ZZZ	"	"	

Surrogate: 1,2-Dichloroethane-d4 98.2 % 70-130 " " "
Surrogate: Toluene-d8 120 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 114 % 70-130 " " "

Origins Laboratory, Inc.



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GW01

6/12/2020 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y006238-06 (Water)

BTEX by EPA 8260D

Benzene	296	100	ug/L	100	B0F1201	KDK	06/12/2020	06/12/2020
Toluene	381	100	"	"	"	KDK	"	"
Ethylbenzene	762	100	"	"	"	KDK	"	"
Xylenes, total	5780	100	"	"	"	KDK	"	"

Surrogate: 1,2-Dichloroethane-d4	86.4 %	70-130			"	"	"
Surrogate: Toluene-d8	100 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	70-130			"	"	"

Origins Laboratory, Inc.



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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
Batch B0F1201 - EPA 5030B (Water)										
Blank (B0F1201-BLK1)					Prepared: 06/12/2020 Analyzed: 06/12/2020					
Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		98.8	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

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Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

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
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Batch B0F1201 - EPA 5030B (Water)

LCS (B0F1201-BS1)

Prepared: 06/12/2020 Analyzed: 06/12/2020

Benzene	24.4	1.00	ug/L	25.0		97.4	70-130			
Toluene	24.5	1.00	"	25.0		98.0	70-130			
Ethylbenzene	26.6	1.00	"	25.0		106	70-130			
m,p-Xylene	54.0	2.00	"	50.0		108	70-130			
o-Xylene	26.5	1.00	"	25.0		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.4	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.3	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

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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
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Batch B0F1201 - EPA 5030B (Water)

Matrix Spike (B0F1201-MS1)		Source: Y006192-01			Prepared: 06/12/2020 Analyzed: 06/12/2020					
Benzene	20.3	1.00	ug/L	25.0	ND	81.2	70-130			
Toluene	21.2	1.00	"	25.0	0.120	84.3	70-130			
Ethylbenzene	23.0	1.00	"	25.0	ND	91.8	70-130			
m,p-Xylene	47.1	2.00	"	50.0	ND	94.1	70-130			
o-Xylene	23.4	1.00	"	25.0	ND	93.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.5	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

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Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1201 - EPA 5030B (Water)										
Matrix Spike Dup (B0F1201-MSD1)	Source: Y006192-01				Prepared: 06/12/2020 Analyzed: 06/12/2020					
Benzene	24.8	1.00	ug/L	25.0	ND	99.2	70-130	20.0	20	
Toluene	25.8	1.00	"	25.0	0.120	103	70-130	19.6	20	
Ethylbenzene	27.9	1.00	"	25.0	ND	112	70-130	19.4	20	
m,p-Xylene	56.9	2.00	"	50.0	ND	114	70-130	18.9	20	
o-Xylene	28.2	1.00	"	25.0	ND	113	70-130	18.8	20	
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.8	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.9	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

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Project: KMG - HSR - Van Schaack 4-33

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
Batch B0F1208 - EPA 5030 (soil)										
Blank (B0F1208-BLK1)					Prepared: 06/12/2020 Analyzed: 06/12/2020					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Naphthalene	ND	0.008	"							U
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		102	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

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Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1208 - EPA 5030 (soil)										
LCS (B0F1208-BS1)					Prepared: 06/12/2020 Analyzed: 06/12/2020					
Benzene	0.050	0.002	mg/kg	0.0500		101	70-130			
Toluene	0.050	0.002	"	0.0500		100	70-130			
Ethylbenzene	0.054	0.002	"	0.0500		107	70-130			
m,p-Xylene	0.110	0.004	"	0.100		110	70-130			
o-Xylene	0.054	0.002	"	0.0500		107	70-130			
Naphthalene	0.048	0.008	"	0.0500		96.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		101	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences
6855 West 119th Avenue
Broomfield CO 80020

Mike Jahn
Project Number: 90200403
Project: KMG - HSR - Van Schaack 4-33

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
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Batch B0F1208 - EPA 5030 (soil)

Matrix Spike (B0F1208-MS1)		Source: Y006204-01			Prepared: 06/12/2020 Analyzed: 06/12/2020					
Benzene	0.049	0.002	mg/kg	0.0500	ND	98.4	70-130			
Toluene	0.049	0.002	"	0.0500	ND	97.3	70-130			
Ethylbenzene	0.051	0.002	"	0.0500	ND	103	70-130			
m,p-Xylene	0.105	0.004	"	0.100	ND	105	70-130			
o-Xylene	0.051	0.002	"	0.0500	ND	102	70-130			
Naphthalene	0.048	0.008	"	0.0500	0.002	91.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		105	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.5	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		104	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1208 - EPA 5030 (soil)										
Matrix Spike Dup (B0F1208-MSD1)	Source: Y006204-01				Prepared: 06/12/2020 Analyzed: 06/12/2020					
Benzene	0.050	0.002	mg/kg	0.0500	ND	100	70-130	2.01	20	
Toluene	0.050	0.002	"	0.0500	ND	100	70-130	2.76	20	
Ethylbenzene	0.053	0.002	"	0.0500	ND	106	70-130	2.96	20	
m,p-Xylene	0.108	0.004	"	0.100	ND	108	70-130	2.94	20	
o-Xylene	0.053	0.002	"	0.0500	ND	106	70-130	3.12	20	
Naphthalene	0.049	0.008	"	0.0500	0.002	93.7	70-130	2.44	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		103	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		104	70-130			

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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
Batch B0F1209 - EPA 3550B										
Blank (B0F1209-BLK1)					Prepared: 06/12/2020 Analyzed: 06/12/2020					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	16		"	25.0		63.6	50-150			

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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
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Batch B0F1209 - EPA 3550B

LCS (B0F1209-BS1)

Prepared: 06/12/2020 Analyzed: 06/12/2020

Diesel (C10-C28)	841	50.0	mg/kg	1000		84.1	70-130			
Residual Range Organics (C28-C40)	803	200	"	1000		80.3	70-130			
Surrogate: o-Terphenyl	36		"	50.0		71.9	50-150			

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Mike Jahn
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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
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Batch B0F1209 - EPA 3550B

Matrix Spike (B0F1209-MS1)		Source: Y006204-01			Prepared: 06/12/2020 Analyzed: 06/12/2020					
Diesel (C10-C28)	775	50.0	mg/kg	1000	ND	77.5	70-130			
Residual Range Organics (C28-C40)	732	200	"	1000	ND	73.2	70-130			
Surrogate: o-Terphenyl	33		"	50.0		65.7	50-150			

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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
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Batch B0F1209 - EPA 3550B

Matrix Spike Dup (B0F1209-MSD1)		Source: Y006204-01			Prepared: 06/12/2020 Analyzed: 06/12/2020					
Diesel (C10-C28)	863	50.0	mg/kg	1000	ND	86.3	70-130	10.9	35	
Residual Range Organics (C28-C40)	847	200	"	1000	ND	84.7	70-130	14.6	35	
Surrogate: o-Terphenyl	38		"	50.0		76.3	50-150			

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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
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Classical Chemistry Parameters - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B0F1213 - NO PREP

Duplicate (B0F1213-DUP1)		Source: Y006238-01			Prepared: 06/12/2020 Analyzed: 06/12/2020					
pH	8.10		pH Units		8.15			0.615	25	

Batch B0F1214 - NO PREP

Blank (B0F1214-BLK1)		Prepared: 06/12/2020 Analyzed: 06/12/2020								
Specific Conductance (EC)	0.00240	0.00500	mmhos/cm							
Duplicate (B0F1214-DUP1)		Source: Y006238-01			Prepared: 06/12/2020 Analyzed: 06/12/2020					
Specific Conductance (EC)	0.140	0.00500	mmhos/cm		0.142			1.14	25	

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Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

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