



June 22, 2020

Eagle Environmental Consulting, Inc.

Dan Coloccia

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Top Operating - Stamp 31-2C

Project Number - [none]

Attached are your analytical results for Top Operating - Stamp 31-2C received by Origins Laboratory, Inc. June 18, 2020. This project is associated with Origins project number Y006326-01.

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

Eagle Environmental Consulting, Inc.
8000 W 44th Ave
Wheat Ridge CO 80033

Dan Coloccia
Project Number: [none]
Project: Top Operating - Stamp 31-2C

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS-13@12'	Y006326-01	Soil	June 18, 2020 13:27	06/18/2020 15:17

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
 8000 W 44th Ave
 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: Top Operating - Stamp 31-2C

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

Sample Receipt Checklist

Origins Work Order: Y006326 Client: Eagle
 Client Project ID: TOP-Stamp 31-2C

Checklist Completed by: SGT KDK Shipped Via: HD
 Date/time completed: 06/18/20 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Airbill #: N/A

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

Cooler Number/Temperature: 1, 4.8 °C _____ °C _____ °C _____ °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	/			
Is there ice present (document if blue ice is used)	/			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)			/	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)			/	
Were all samples received intact ⁽¹⁾ ?	/			
Was adequate sample volume provided ⁽¹⁾ ?	/			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?			/	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	/			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	/			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	/			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	/			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			/	
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)			/	
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 DM (Project Manager)

6-19-20
Date/Time Reviewed

Origins Laboratory, Inc.



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Dan Coloccia
 Project Number: [none]
 Project: Top Operating - Stamp 31-2C

FS-13@12'

6/18/2020 1:27:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006326-01 (Soil)

BTEX/TVPH by EPA 8260D

Benzene	ND	0.00200	mg/kg	1	B0F1807	KDK	06/18/2020	06/18/2020	U
Toluene	ND	0.00200	"	"	"	KDK	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	KDK	"	"	U
Xylenes, total	ND	0.00200	"	"	"	KDK	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	92.9 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	70-130			"	"	"	"	

Diesel Range Organics (DRO/TEPH) by EPA 8015D

Diesel (C10-C28)	ND	50.0	mg/kg	1	B0F1808	TEM	06/18/2020	06/19/2020	U
Surrogate: o-Terphenyl	64.6 %	50-150			"	"	"	"	

Origins Laboratory, Inc.



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 Wheat Ridge CO 80033

Dan Coloccia
 Project Number: [none]
 Project: Top Operating - Stamp 31-2C

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 B0F1807 - EPA 5030 (soil)

Blank (B0F1807-BLK1)

Prepared: 06/18/2020 Analyzed: 06/18/2020

Benzene	ND	0.00200	mg/kg							U
Toluene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		87.2	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.14		"	0.125		108	70-130			

Origins Laboratory, Inc.



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Dan Coloccia
 Project Number: [none]
 Project: Top Operating - Stamp 31-2C

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 B0F1807 - EPA 5030 (soil)

LCS (B0F1807-BS1)

Prepared: 06/18/2020 Analyzed: 06/18/2020

Benzene	0.108	0.00200	mg/kg	0.100		108	70-130			
Toluene	0.111	0.00200	"	0.100		111	70-130			
Ethylbenzene	0.110	0.00200	"	0.100		110	70-130			
m,p-Xylene	0.208	0.00400	"	0.200		104	70-130			
o-Xylene	0.105	0.00200	"	0.100		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.10		"	0.125		83.2	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.14		"	0.125		109	70-130			

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Dan Coloccia
 Project Number: [none]
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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 B0F1807 - EPA 5030 (soil)

Matrix Spike (B0F1807-MS1)	Source: Y006322-01			Prepared: 06/18/2020 Analyzed: 06/18/2020						
Benzene	0.109	0.00200	mg/kg	0.100	ND	109	70-130			
Toluene	0.117	0.00200	"	0.100	ND	117	70-130			
Ethylbenzene	0.116	0.00200	"	0.100	ND	116	70-130			
m,p-Xylene	0.218	0.00400	"	0.200	ND	109	70-130			
o-Xylene	0.105	0.00200	"	0.100	ND	105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.10		"	0.125		83.5	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.14		"	0.125		108	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 B0F1807 - EPA 5030 (soil)

Matrix Spike Dup (B0F1807-MSD1)	Source: Y006322-01			Prepared: 06/18/2020 Analyzed: 06/18/2020						
Benzene	0.113	0.00200	mg/kg	0.100	ND	113	70-130	3.48	20	
Toluene	0.119	0.00200	"	0.100	ND	119	70-130	2.02	20	
Ethylbenzene	0.118	0.00200	"	0.100	ND	118	70-130	1.08	20	
m,p-Xylene	0.224	0.00400	"	0.200	ND	112	70-130	2.56	20	
o-Xylene	0.107	0.00200	"	0.100	ND	107	70-130	1.45	20	
Surrogate: 1,2-Dichloroethane-d4	0.10		"	0.125		84.0	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		106	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 B0F1808 - EPA 3550B										
Blank (B0F1808-BLK1)					Prepared: 06/18/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Surrogate: o-Terphenyl	16		"	25.0		64.8	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 B0F1808 - EPA 3550B

LCS (B0F1808-BS1)

Prepared: 06/18/2020 Analyzed: 06/18/2020

Diesel (C10-C28)	872	50.0	mg/kg	1000		87.2	70-130			
Surrogate: o-Terphenyl	38		"	50.0		75.4	50-150			

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 Project Number: [none]
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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
Batch B0F1808 - EPA 3550B										
Matrix Spike (B0F1808-MS1)		Source: Y006323-01			Prepared: 06/18/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	889	50.0	mg/kg	1000	ND	88.9	70-130			
Surrogate: o-Terphenyl	35		"	50.0		69.8	50-150			

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 Project: Top Operating - Stamp 31-2C

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 B0F1808 - EPA 3550B										
Matrix Spike Dup (B0F1808-MSD1)		Source: Y006323-01			Prepared: 06/18/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	908	50.0	mg/kg	1000	ND	90.8	70-130	2.14	35	
Surrogate: o-Terphenyl	35		"	50.0		70.9	50-150			

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Project: Top Operating - Stamp 31-2C

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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