



May 04, 2023

Eagle Environmental Consulting, LLC

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Noble - HSR - Tudor #11-31A Project Number - [none]

Attached are your analytical results for Noble - HSR - Tudor #11-31A received by Origins Laboratory, Inc. April 21, 2023. This project is associated with Origins project number Y304526-01.

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, LLC
8000 W 44th Ave
Wheat Ridge CO 80033

Martin C Eckert III
Project Number: [none]
Project: Noble - HSR - Tudor #11-31A

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH-FS-01@6'	Y304526-01	Soil	April 21, 2023 12:50	04/21/2023 14:17

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager

ORIGINS

LABORATORY, INC

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

Martin C Eckert III
 Project Number: [none]
 Project: Noble - HSR - Tudor #11-31A

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

Sample Receipt Checklist

Origins Work Order: NB04520 Client: Eagle
 Client Project ID: Tudor #11-31A


Checklist Completed by: EMSKON Shipped Via: HD
 Date/time completed: 4/24/23 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Airbill #: NA

Matrix(s) Received: (Check all that apply) Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1 12.0 °C / _____ °C / _____ °C / _____ °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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTS due within 48 hours present ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> 1/4 inch bubble) present? If yes, contact client and note in narrative.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 ensure sample integrity)/pH < 2 for samples preserved with HNO3, HCL, H2SO4 / (pH > 10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 be in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature] Date/Time Reviewed 4/25/23

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Jordan A. Bynon, Project Manager

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 Wheat Ridge CO 80033

Martin C Eckert III
 Project Number: [none]
 Project: Noble - HSR - Tudor #11-31A

WH-FS-01@6'
4/21/2023 12:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y304526-01 (Soil)

Boron (DTPA Sorbitol)

Boron	0.108		0.0993	mg/L	1	B3D2715	04/27/2023	05/02/2023	
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DRO/ORO by EPA 8015D


Diesel (C10-C28)	ND		25.0	mg/kg	1	B3D2425	04/24/2023	04/26/2023	U
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	U

Surrogate: o-Terphenyl	84.3%		50-150	"	"	"	"	"	"
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B3D2431	04/24/2023	04/25/2023	U
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	U
Benzene	ND		0.00200	"	"	"	"	"	U
Ethylbenzene	ND		0.00200	"	"	"	"	"	U
Toluene	ND		0.00200	"	"	"	"	"	U
Xylenes, total	ND		0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	131%		70-130	"	"	"	"	"	S-GC
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WH-FS-01@6'
 4/21/2023 12:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y304526-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	92.0 %		70-130			B3D24 31	04/24/2023	04/25/2023	
Surrogate: 4-Bromofluorobenzene	93.7 %		70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	1.24		0.499	meq/L	10	[CALC]	04/26/2023	04/28/2023	
Magnesium	ND		0.823	"	"	"	"	"	
Sodium	1.52		0.435	"	"	"	"	"	

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L678861	04/28/2023	04/28/2023	
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"	
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	ND	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"	

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WH-FS-01@6'
4/21/2023 12:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y304526-01 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L678861	04/28/2023	04/28/2023	
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	43.7 %		33-115			"	"	"	"
Surrogate: 4-Terphenyl-d14	50 %		33-122			"	"	"	"
Surrogate: Nitrobenzene-d5	44.6 %		29-110			"	"	"	"

pH in Soil by 9045D

pH	7.99			pH Units	1	B3D2625	04/26/2023	04/27/2023	
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SAR by 20B Saturated Paste

SAR	1.69			SAR	1	B3D2621	04/26/2023	04/28/2023	
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.467		0.00500	mmhos/cm	1	B3D2625	04/26/2023	04/27/2023	
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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
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Batch B3D2425 - EPA 3550B

Blank (B3D2425-BLK1)

Prepared: 04/24/2023 Analyzed: 04/26/2023

Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	23		"	24.9		93.1	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 B3D2425 - EPA 3550B

LCS (B3D2425-BS1)

Prepared: 04/24/2023 Analyzed: 04/26/2023

Diesel (C10-C28)	949	50.0	mg/kg	1000		94.9	70-130			
Residual Range Organics (C28-C40)	982	200	"	1000		98.2	70-130			
Surrogate: o-Terphenyl	46		"	49.8		93.2	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 B3D2425 - EPA 3550B

Matrix Spike (B3D2425-MS1)

Source: Y304515-01

Prepared: 04/24/2023 Analyzed: 04/26/2023

Diesel (C10-C28)	973	50.0	mg/kg	1000	ND	97.3	70-130			
Residual Range Organics (C28-C40)	1030	200	"	1000	ND	103	70-130			
Surrogate: o-Terphenyl	52		"	49.8		104	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 B3D2425 - EPA 3550B

Matrix Spike Dup (B3D2425-MSD1)

Source: Y304515-01

Prepared: 04/24/2023 Analyzed: 04/26/2023

Diesel (C10-C28)	1020	50.0	mg/kg	1000	ND	102	70-130	4.81	35	
Residual Range Organics (C28-C40)	1070	200	"	1000	ND	107	70-130	4.02	35	
Surrogate: o-Terphenyl	53		"	49.8		107	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 B3D2431 - EPA 5030 (soil)

Blank (B3D2431-BLK1)

Prepared: 04/24/2023 Analyzed: 04/24/2023

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.14		"	0.125		113	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		92.5	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 B3D2431 - EPA 5030 (soil)

LCS (B3D2431-BS1)

Prepared: 04/24/2023 Analyzed: 04/24/2023

1,2,4-Trimethylbenzene	0.107	0.00200	mg/kg	0.100		107	70-130			
1,3,5-Trimethylbenzene	0.107	0.00200	"	0.100		107	70-130			
Benzene	0.0985	0.00200	"	0.100		98.5	70-130			
Ethylbenzene	0.102	0.00200	"	0.100		102	70-130			
Naphthalene	0.107	0.00380	"	0.100		107	70-130			
Toluene	0.0962	0.00200	"	0.100		96.2	70-130			
o-Xylene	0.113	0.00200	"	0.100		113	70-130			
m,p-Xylene	0.210	0.00400	"	0.200		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		107	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		98.5	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 B3D2431 - EPA 5030 (soil)

Matrix Spike (B3D2431-MS1)

Source: Y304509-01

Prepared: 04/24/2023 Analyzed: 04/24/2023

1,2,4-Trimethylbenzene	0.0940	0.00200	mg/kg	0.100	ND	94.0	70-130			
1,3,5-Trimethylbenzene	0.0888	0.00200	"	0.100	ND	88.8	70-130			
Benzene	0.0961	0.00200	"	0.100	ND	96.1	70-130			
Ethylbenzene	0.0924	0.00200	"	0.100	ND	92.4	70-130			
Naphthalene	0.111	0.00380	"	0.100	ND	111	70-130			
Toluene	0.0887	0.00200	"	0.100	ND	88.7	70-130			
o-Xylene	0.102	0.00200	"	0.100	ND	102	70-130			
m,p-Xylene	0.191	0.00400	"	0.200	ND	95.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.15		"	0.125		119	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		101	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 B3D2431 - EPA 5030 (soil)

Matrix Spike Dup (B3D2431-MSD1)

Source: Y304509-01

Prepared: 04/24/2023 Analyzed: 04/24/2023

1,2,4-Trimethylbenzene	0.0960	0.00200	mg/kg	0.100	ND	96.0	70-130	2.11	20	
1,3,5-Trimethylbenzene	0.0918	0.00200	"	0.100	ND	91.8	70-130	3.32	20	
Benzene	0.0947	0.00200	"	0.100	ND	94.7	70-130	1.53	20	
Ethylbenzene	0.0939	0.00200	"	0.100	ND	93.9	70-130	1.59	20	
Naphthalene	0.101	0.00380	"	0.100	ND	101	70-130	9.94	20	
Toluene	0.0899	0.00200	"	0.100	ND	89.9	70-130	1.37	20	
o-Xylene	0.101	0.00200	"	0.100	ND	101	70-130	0.276	20	
m,p-Xylene	0.194	0.00400	"	0.200	ND	96.8	70-130	1.55	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		95.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		98.7	70-130			

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Martin C Eckert III
 Project Number: [none]
 Project: Noble - HSR - Tudor #11-31A

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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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 B3D2621 - Saturated Paste Metals

Blank (B3D2621-BLK1)

Prepared: 04/26/2023 Analyzed: 04/28/2023

SAR	0.00		SAR							
Calcium PPM	ND	10.0	mg/L							
Magnesium PPM	ND	10.0	"							
Sodium PPM	ND	10.0	"							

Duplicate (B3D2621-DUP1)

Source: Y304487-08

Prepared: 04/26/2023 Analyzed: 04/28/2023

Calcium PPM	49.4	10.0	mg/L		49.8		0.740		50	
SAR	0.00		SAR		0.803			200	200	
Magnesium PPM	44.7	10.0	mg/L		44.5		0.448		50	
Sodium PPM	34.1	10.0	"		32.4		5.26		50	

Batch B3D2715 - DTPA Sorbitol Preparation

Blank (B3D2715-BLK1)

Prepared: 04/27/2023 Analyzed: 05/02/2023

Boron	ND	0.100	mg/L							
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Duplicate (B3D2715-DUP1)

Source: Y304515-01

Prepared: 04/27/2023 Analyzed: 05/02/2023

Boron	1.67	0.101	mg/L		1.63			2.57	50	
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Eagle Environmental Consulting, LLC
 8000 W 44th Ave
 Wheat Ridge CO 80033

Martin C Eckert III
 Project Number: [none]
 Project: Noble - HSR - Tudor #11-31A

Saturated Paste - 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 B3D2625 - Saturated Paste pH/EC

Blank (B3D2625-BLK1)

Prepared: 04/26/2023 Analyzed: 04/27/2023

Specific Conductance (EC) ND 0.00500 mmhos/cm

Duplicate (B3D2625-DUP1)

Source: Y304487-08

Prepared: 04/26/2023 Analyzed: 04/27/2023

pH	8.03		pH Units	8.09		0.744	25
Specific Conductance (EC)	0.752	0.00500	mmhos/cm	0.758		0.808	25

Origins Laboratory, Inc.

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Jordan A. Bynon, Project Manager

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Martin C Eckert III
 Project Number: [none]
 Project: Noble - HSR - Tudor #11-31A

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L678861 - 3550B

MSD (L 83335-MSD-L678861)

Source: 83335

Prepared: 04/28/2023 Analyzed: 04/28/2023

2-Methylnaphthalene	0.0904	0.00201	mg/Kg	0.163	<0.00194	55.4	30-130	12	30	
Fluorene	0.0923	0.00067	"	0.163	<0.000286	56.6	30-130	6.7	30	
Pyrene	0.101	0.00067	"	0.163	<0.000643	61.9	30-130	2.3	30	
Indeno(1,2,3-cd)pyrene	0.0788	0.00067	"	0.163	<0.000627	48.3	30-130	1	30	
Fluoranthene	0.101	0.00067	"	0.163	<0.000394	61.9	30-130	0	30	
Dibenz(a,h)anthracene	0.0913	0.00067	"	0.163	<0.000614	56	30-130	0.4	30	
Chrysene	0.105	0.00067	"	0.163	<0.000624	64.4	30-130	0.9	30	
Naphthalene	0.0812	0.00201	"	0.163	<0.00145	49.8	30-130	13.3	30	
1-Methylnaphthalene	0.0804	0.00201	"	0.163	<0.00109	49.3	30-130	11.9	30	
Benzo(k)fluoranthene	0.0951	0.00067	"	0.163	<0.000437	58.3	30-130	8.8	30	
Acenaphthene	0.0897	0.00067	"	0.163	<0.000304	55	30-130	9.5	30	
Anthracene	0.0986	0.00067	"	0.163	<0.000334	60.4	30-130	1.4	30	
Benzo(a)anthracene	0.108	0.00067	"	0.163	<0.000493	66.2	30-130	2.8	30	
Benzo(a)pyrene	0.108	0.00067	"	0.163	<0.000468	66.2	30-130	0	30	
Benzo(b)fluoranthene	0.0841	0.00067	"	0.163	<0.000585	51.5	30-130	5.5	30	
Surrogate: 2-Fluorobiphenyl	49.5		"	0.327	146	49.5	33-115			
Surrogate: Nitrobenzene-d5	50.1		"	0.327	140	50.1	29-110			
Surrogate: 4-Terphenyl-d14	58.7		"	0.327	166	58.7	33-122			

MS (L 83335-MS-L678861)

Source: 83335

Prepared: 04/28/2023 Analyzed: 04/28/2023

Benzo(k)fluoranthene	0.087	0.00067	mg/Kg	0.167	<0.000437	52	30-130			
Acenaphthene	0.0987	0.00067	"	0.167	<0.000304	59.1	30-130			
Naphthalene	0.0928	0.00201	"	0.167	<0.00145	55.5	30-130			
Indeno(1,2,3-cd)pyrene	0.078	0.00067	"	0.167	<0.000627	46.7	30-130			
Fluorene	0.0987	0.00067	"	0.167	<0.000286	59.1	30-130			
Fluoranthene	0.101	0.00067	"	0.167	<0.000394	60.4	30-130			
Dibenz(a,h)anthracene	0.0909	0.00067	"	0.167	<0.000614	54.4	30-130			

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PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L678861 - 3550B

MS (L 83335-MS-L678861)

Source: 83335

Prepared: 04/28/2023 Analyzed: 04/28/2023

Chrysene	0.106	0.00067	mg/Kg	0.167	<0.000624	63.4	30-130			
1-Methylnaphthalene	0.0906	0.00201	"	0.167	<0.00109	54.2	30-130			
Benzo(a)pyrene	0.108	0.00067	"	0.167	<0.000468	64.6	30-130			
Anthracene	0.1	0.00067	"	0.167	<0.000334	59.8	30-130			
Pyrene	0.0987	0.00067	"	0.167	<0.000643	59.1	30-130			
2-Methylnaphthalene	0.102	0.00201	"	0.167	<0.00194	61	30-130			
Benzo(b)fluoranthene	0.0889	0.00067	"	0.167	<0.000585	53.2	30-130			
Benzo(a)anthracene	0.105	0.00067	"	0.167	<0.000493	62.8	30-130			
Surrogate: Nitrobenzene-d5	54.9		"	0.333	140	54.9	29-110			
Surrogate: 4-Terphenyl-d14	57.3		"	0.333	166	57.3	33-122			
Surrogate: 2-Fluorobiphenyl	56.1		"	0.333	146	56.1	33-115			

LCS (LCS-L678861)

Prepared: 04/28/2023 Analyzed: 04/28/2023

Chrysene	0.109	0.00067	mg/Kg	0.167		65.2	30-130			
Dibenz(a,h)anthracene	0.0824	0.00067	"	0.167		49.3	30-130			
Fluoranthene	0.105	0.00067	"	0.167		62.8	30-130			
Fluorene	0.0937	0.00067	"	0.167		56.1	30-130			
Indeno(1,2,3-cd)pyrene	0.067	0.00067	"	0.167		40.1	30-130			
Naphthalene	0.087	0.00201	"	0.167		52	30-130			
Benzo(k)fluoranthene	0.0906	0.00067	"	0.167		54.2	30-130			
Pyrene	0.105	0.00067	"	0.167		62.8	30-130			
Benzo(a)pyrene	0.108	0.00067	"	0.167		64.6	30-130			
Benzo(a)anthracene	0.111	0.00067	"	0.167		66.4	30-130			
Anthracene	0.102	0.00067	"	0.167		61	30-130			
Acenaphthene	0.0937	0.00067	"	0.167		56.1	30-130			
2-Methylnaphthalene	0.0938	0.00201	"	0.167		56.1	30-130			
1-Methylnaphthalene	0.0812	0.00201	"	0.167		48.6	30-130			

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PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch L678861 - 3550B

LCS (LCS-L678861)

Prepared: 04/28/2023 Analyzed: 04/28/2023

Benzo(b)fluoranthene	0.0948	0.00067	mg/Kg	0.167		56.7	30-130			
Surrogate: Nitrobenzene-d5	56.7		"	0.333		56.7	29-110			
Surrogate: 4-Terphenyl-d14	65.1		"	0.333		65.1	33-122			
Surrogate: 2-Fluorobiphenyl	54		"	0.333		54	33-115			

LRB (LRB-L678861)

Prepared: 04/28/2023 Analyzed: 04/28/2023

Chrysene	ND	0.00067	mg/Kg							
Dibenz(a,h)anthracene	ND	0.00067	"							
Fluoranthene	ND	0.00067	"							
Fluorene	ND	0.00067	"							
Benzo(k)fluoranthene	ND	0.00067	"							
Naphthalene	ND	0.00201	"							
Indeno(1,2,3-cd)pyrene	ND	0.00067	"							
Benzo(b)fluoranthene	ND	0.00067	"							
Benzo(a)pyrene	ND	0.00067	"							
Benzo(a)anthracene	ND	0.00067	"							
Acenaphthene	ND	0.00067	"							
2-Methylnaphthalene	ND	0.00201	"							
1-Methylnaphthalene	ND	0.00201	"							
Pyrene	ND	0.00067	"							
Anthracene	ND	0.00067	"							
Surrogate: Nitrobenzene-d5	58.5		"	0.333		58.5	29-110			
Surrogate: 4-Terphenyl-d14	69.6		"	0.333		69.6	33-122			
Surrogate: 2-Fluorobiphenyl	56.1		"	0.333		56.1	33-115			

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Martin C Eckert III
Project Number: [none]
Project: Noble - HSR - Tudor #11-31A

Notes and Definitions

- U Sample is Non-Detect.
 - S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
 - 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.

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