

November 14, 2022

KP Kauffman Co. Inc.

Levi Kirk

1700 Lincoln St #4550

Denver CO 80203

Project Name - Koch 41-6 Flowline

Project Number - [none]

Attached are your analytical results for Koch 41-6 Flowline received by Origins Laboratory, Inc. October 31, 2022. This project is associated with Origins project number Y211019-01.

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



KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-3@7'	Y211019-01	Soil	October 31, 2022 11:00	10/31/2022 16:00
SS-6@7'	Y211019-02	Soil	October 31, 2022 11:10	10/31/2022 16:00
SS-9@7'	Y211019-03	Soil	October 31, 2022 11:20	10/31/2022 16:00

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

4211019

page 1 of 1

Client: K. P. Kauffman
Address: 1675 Broadway Denver, CO 80202
Telephone Number: 3038254822
Email Address: PrimaryContractor@marcomilc.net

Project Manager: Levi Kirk
Project Name: KOCH 41-6 FLOWLINE
Project Number:
Samples Collected By: B.W.

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
SS-3 @ 7'	10-31-22	1100	2	X					X			1	
SS-6 @ 7'	110		2	X					X			2	
SS-9 @ 7'	1100		2	X					X			3	
												4	
												5	
												6	
												7	
												8	
												9	
												10	

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
	10-31-22	1600		10/31/22	1600	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	

13.0 Date Results Needed

Origins Laboratory, Inc.

J. Bynon

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KP Kauffman Co. Inc.

1700 Lincoln St #4550

Denver CO 80203

Levi Kirk

Project Number: [none]

Project: Koch 41-6 Flowline

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 4211019

Client: KP Kauffman

Client Project ID: Koch 41-6

Checklist Completed by: EHS

Shipped Via: HD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 11/1/12

Airbill #: NA

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

/ Water

/ Other:

(Describe)

Cooler Number/Temperature: 1 13.0 °C / °C / °C / °C

Thermometer ID: T004

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 checked="" type="checkbox"/>		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"/>		
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: Jb (Project Manager)

11-2-22
Date/Time Reviewed

Origins Laboratory, Inc.

J. Bynon

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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-3@7'

10/31/2022 11:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-01 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.101	mg/L	1	B2K0411	11/04/2022	11/07/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B2K0203	11/02/2022	11/04/2022	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	100 %	50-150		"	"	"
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B2K0335	11/03/2022	11/09/2022	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	0.00554	0.00200	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		"	"	"
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-3@7'

10/31/2022 11:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	99.1 %	70-130	B2K03 35	11/03/2022	11/09/2022
Surrogate: 4-Bromofluorobenzene	100 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.71	0.499	meq/L	10	[CALC]	11/04/2022	11/08/2022
Magnesium	1.54	0.823	"	"	"	"	"
Sodium	1.54	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00549	0.0101	mg/Kg	5	L646823	11/03/2022	11/04/2022
2-Methylnaphthalene	ND	0.00972	0.0101	"	"	"	"	"
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"
Anthracene	ND	0.00167	0.00335	"	"	"	"	"
Benzo(a)anthracene	ND	0.00247	0.00335	"	"	"	"	"
Benzo(a)pyrene	ND	0.00234	0.00335	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.00293	0.00335	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.00219	0.00335	"	"	"	"	"
Chrysene	ND	0.00312	0.00335	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.00307	0.00335	"	"	"	"	"
Fluoranthene	ND	0.00197	0.00335	"	"	"	"	"

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1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-3@7'

10/31/2022 11:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y211019-01 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.00143	0.00335	mg/Kg	5	L646823	11/03/2022	11/04/2022
Indeno(1,2,3-cd)pyrene	ND	0.00314	0.00335	"	"	"	"	"
Naphthalene	ND	0.0073	0.0101	"	"	"	"	"
Pyrene	ND	0.00322	0.00335	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	54.4 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	79.9 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	52 %	29-110	"	"	"

pH in Soil by 9045D

pH	8.34	pH Units	1	B2K0417	11/04/2022	11/08/2022
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SAR by 20B Saturated Paste

SAR	1.06	SAR	1	B2K0407	11/04/2022	11/08/2022
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.585	0.00500	mmhos/cm	1	B2K0422	11/04/2022	11/08/2022
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Table 915 metals by EPA 6020B

Arsenic	4.01	0.0981	mg/kg	10	B2K0302	11/03/2022	11/03/2022
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-3@7'

10/31/2022 11:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-01 (Soil)

Table 915 metals by EPA 6020B

Barium	118	9.81	mg/kg	10	B2K0302	11/03/2022	11/03/2022
Cadmium	0.174	0.0981	"	"	"	"	"
Copper	12.9	9.81	"	"	"	"	"
Lead	9.97	9.81	"	"	"	"	"
Nickel	13.2	9.81	"	"	"	"	"
Selenium	0.195	0.0981	"	"	"	"	"
Silver	ND	0.0981	"	"	"	"	"
Zinc	ND	98.1	"	"	"	"	"

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L647282	10/31/2022	11/05/2022
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1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-6@7'

10/31/2022 11:10:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.224	0.0999	mg/L	1	B2K0411	11/04/2022	11/07/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B2K0203	11/02/2022	11/04/2022	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	100 %	50-150			"	"	"
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B2K0335	11/03/2022	11/09/2022	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	108 %	70-130			"	"	"
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-6@7'

10/31/2022 11:10:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-02 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	98.5 %	70-130	B2K03 35	11/03/2022	11/09/2022
Surrogate: 4-Bromofluorobenzene	101 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	1.99	0.499	meq/L	10	[CALC]	11/04/2022	11/08/2022
Magnesium	1.89	0.823	"	"	"	"	"
Sodium	3.31	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L646823	11/03/2022	11/04/2022
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	"	"	"	"	"

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-6@7'

10/31/2022 11:10:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y211019-02 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L646823	11/03/2022	11/04/2022
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	46.1 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	56.4 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	43.6 %	29-110	"	"	"

pH in Soil by 9045D

pH	8.37	pH Units	1	B2K0417	11/04/2022	11/08/2022
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SAR by 20B Saturated Paste

SAR	2.37	SAR	1	B2K0407	11/04/2022	11/08/2022
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.742	0.00500	mmhos/cm	1	B2K0422	11/04/2022	11/08/2022
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Table 915 metals by EPA 6020B

Arsenic	4.46	0.0979	mg/kg	10	B2K0302	11/03/2022	11/03/2022
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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-6@7'

10/31/2022 11:10:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-02 (Soil)

Table 915 metals by EPA 6020B

Barium	131	9.79	mg/kg	10	B2K0302	11/03/2022	11/03/2022
Cadmium	0.178	0.0979	"	"	"	"	"
Copper	12.0	9.79	"	"	"	"	"
Lead	10.2	9.79	"	"	"	"	"
Nickel	13.2	9.79	"	"	"	"	"
Selenium	0.157	0.0979	"	"	"	"	"
Silver	ND	0.0979	"	"	"	"	"
Zinc	ND	97.9	"	"	"	"	"

Total Metals by 7196A

Chromium, Hexavalent	ND	0.245	0.504	mg/Kg	1	L647282	10/31/2022	11/05/2022
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-9@7'

10/31/2022 11:20:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-03 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.0982	mg/L	1	B2K0411	11/04/2022	11/07/2022	
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DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B2K0203	11/02/2022	11/04/2022	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	101 %	50-150		"	"	"
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GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B2K0335	11/03/2022	11/09/2022	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	110 %	70-130		"	"	"
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-9@7'

10/31/2022 11:20:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-03 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	98.9 %	70-130	B2K03 35	11/03/2022	11/09/2022
Surrogate: 4-Bromofluorobenzene	102 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.65	0.499	meq/L	10	[CALC]	11/04/2022	11/08/2022
Magnesium	1.67	0.823	"	"	"	"	"
Sodium	5.17	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00549	0.0101	mg/Kg	5	L646823	11/03/2022	11/04/2022
2-Methylnaphthalene	ND	0.00972	0.0101	"	"	"	"	"
Acenaphthene	ND	0.00152	0.00335	"	"	"	"	"
Anthracene	ND	0.00167	0.00335	"	"	"	"	"
Benzo(a)anthracene	ND	0.00247	0.00335	"	"	"	"	"
Benzo(a)pyrene	ND	0.00234	0.00335	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.00293	0.00335	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.00219	0.00335	"	"	"	"	"
Chrysene	ND	0.00312	0.00335	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.00307	0.00335	"	"	"	"	"
Fluoranthene	ND	0.00197	0.00335	"	"	"	"	"

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-9@7'

10/31/2022 11:20:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Waypoint Analytical, LLC.
Y211019-03 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.00143	0.00335	mg/Kg	5	L646823	11/03/2022	11/04/2022
Indeno(1,2,3-cd)pyrene	ND	0.00314	0.00335	"	"	"	"	"
Naphthalene	ND	0.0073	0.0101	"	"	"	"	"
Pyrene	ND	0.00322	0.00335	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	48.9 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	62.9 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	44.7 %	29-110	"	"	"

pH in Soil by 9045D

pH	8.35	pH Units	1	B2K0417	11/04/2022	11/08/2022
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SAR by 20B Saturated Paste

SAR	3.52	SAR	1	B2K0407	11/04/2022	11/08/2022
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Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.982	0.00500	mmhos/cm	1	B2K0422	11/04/2022	11/08/2022
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Table 915 metals by EPA 6020B

Arsenic	3.40	0.0947	mg/kg	10	B2K0302	11/03/2022	11/03/2022
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

SS-9@7'

10/31/2022 11:20:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y211019-03 (Soil)

Table 915 metals by EPA 6020B

Barium	106	9.47	mg/kg	10	B2K0302	11/03/2022	11/03/2022
Cadmium	0.124	0.0947	"	"	"	"	"
Copper	11.1	9.47	"	"	"	"	"
Lead	ND	9.47	"	"	"	"	"
Nickel	12.5	9.47	"	"	"	"	"
Selenium	ND	0.0947	"	"	"	"	"
Silver	ND	0.0947	"	"	"	"	"
Zinc	ND	94.7	"	"	"	"	"

Total Metals by 7196A

Chromium, Hexavalent	ND	0.247	0.508	mg/Kg	1	L647282	10/31/2022	11/05/2022
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0203 - EPA 3580										
Blank (B2K0203-BLK1)					Prepared: 11/02/2022 Analyzed: 11/04/2022					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	26		"	24.9		106	50-150			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0203 - EPA 3580

LCS (B2K0203-BS1)

Prepared: 11/02/2022 Analyzed: 11/04/2022

Diesel (C10-C28)	990	50.0	mg/kg	1000		99.0	70-130			
Residual Range Organics (C28-C40)	1030	200	"	1000		103	70-130			
Surrogate: o-Terphenyl	51		"	49.8		102	50-150			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0203 - EPA 3580

Matrix Spike (B2K0203-MS1)		Source: Y211012-01			Prepared: 11/02/2022 Analyzed: 11/04/2022					
Diesel (C10-C28)	954	50.0	mg/kg	1000	ND	95.4	70-130			
Residual Range Organics (C28-C40)	1050	200	"	1000	ND	105	70-130			
Surrogate: o-Terphenyl	47		"	49.8		95.1	50-150			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0203 - EPA 3580										
Matrix Spike Dup (B2K0203-MSD1)		Source: Y211012-01			Prepared: 11/02/2022 Analyzed: 11/04/2022					
Diesel (C10-C28)	1030	50.0	mg/kg	1000	ND	103	70-130	7.52	35	
Residual Range Organics (C28-C40)	1080	200	"	1000	ND	108	70-130	3.00	35	
Surrogate: o-Terphenyl	48		"	49.8		97.0	50-150			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0335 - EPA 5030 (soil)										
Blank (B2K0335-BLK1)					Prepared: 11/03/2022 Analyzed: 11/08/2022					
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	0.13		"	0.125		105	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0335 - EPA 5030 (soil)										
LCS (B2K0335-BS1)					Prepared: 11/03/2022 Analyzed: 11/08/2022					
1,2,4-Trimethylbenzene	0.116	0.00200	mg/kg	0.100		116	70-130			
1,3,5-Trimethylbenzene	0.113	0.00200	"	0.100		113	70-130			
Benzene	0.100	0.00200	"	0.100		100	70-130			
Ethylbenzene	0.119	0.00200	"	0.100		119	70-130			
Naphthalene	0.102	0.00380	"	0.100		102	70-130			
Toluene	0.107	0.00200	"	0.100		107	70-130			
o-Xylene	0.118	0.00200	"	0.100		118	70-130			
m,p-Xylene	0.221	0.00400	"	0.200		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		99.9	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		103	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0335 - EPA 5030 (soil)

Matrix Spike (B2K0335-MS1)		Source: Y211016-01			Prepared: 11/03/2022 Analyzed: 11/08/2022					
1,2,4-Trimethylbenzene	0.0794	0.00200	mg/kg	0.100	ND	79.4	70-130			
1,3,5-Trimethylbenzene	0.0770	0.00200	"	0.100	ND	77.0	70-130			
Benzene	0.0835	0.00200	"	0.100	ND	83.5	70-130			
Ethylbenzene	0.0893	0.00200	"	0.100	ND	89.3	70-130			
Naphthalene	0.0842	0.00380	"	0.100	ND	84.2	70-130			
Toluene	0.0827	0.00200	"	0.100	ND	82.7	70-130			
o-Xylene	0.0877	0.00200	"	0.100	ND	87.7	70-130			
m,p-Xylene	0.164	0.00400	"	0.200	ND	82.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		106	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.0	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		101	70-130			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0335 - EPA 5030 (soil)										
Matrix Spike Dup (B2K0335-MSD1)			Source: Y211016-01		Prepared: 11/03/2022 Analyzed: 11/08/2022					
1,2,4-Trimethylbenzene	0.0988	0.00200	mg/kg	0.100	ND	98.8	70-130	21.8	20	QR-02
1,3,5-Trimethylbenzene	0.0966	0.00200	"	0.100	ND	96.6	70-130	22.6	20	QR-02
Benzene	0.0977	0.00200	"	0.100	ND	97.7	70-130	15.7	20	
Ethylbenzene	0.108	0.00200	"	0.100	ND	108	70-130	18.8	20	
Naphthalene	0.0979	0.00380	"	0.100	ND	97.9	70-130	15.0	20	
Toluene	0.0982	0.00200	"	0.100	ND	98.2	70-130	17.2	20	
o-Xylene	0.106	0.00200	"	0.100	ND	106	70-130	19.0	20	
m,p-Xylene	0.200	0.00400	"	0.200	ND	100	70-130	19.7	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		103	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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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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
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Batch B2K0302 - EPA 3050B

Blank (B2K0302-BLK1)

Prepared: 11/03/2022 Analyzed: 11/03/2022

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 (B2K0302-BS1)

Prepared: 11/03/2022 Analyzed: 11/03/2022

Arsenic	0.0482	0.000100	mg/kg	0.0500	96.5	80-120
Barium	4.93	0.0100	"	5.00	98.5	80-120
Cadmium	0.0497	0.000100	"	0.0500	99.4	80-120
Copper	0.523	0.0100	"	0.500	105	80-120
Lead	0.0504	0.0100	"	0.0500	101	80-120
Nickel	0.0515	0.0100	"	0.0500	103	80-120
Selenium	0.0474	0.000100	"	0.0500	94.7	80-120
Silver	0.0497	0.000100	"	0.0500	99.4	80-120
Zinc	0.497	0.100	"	0.500	99.5	80-120

Matrix Spike (B2K0302-MS1)

Source: Y211018-08

Prepared: 11/03/2022 Analyzed: 11/03/2022

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0302 - EPA 3050B										
Matrix Spike (B2K0302-MS1)		Source: Y211018-08			Prepared: 11/03/2022 Analyzed: 11/03/2022					
Arsenic	8.55	0.0959	mg/kg	4.79	4.77	78.8	75-125			
Barium	626	9.59	"	479	165	96.2	75-125			
Cadmium	5.21	0.0959	"	4.79	0.276	103	75-125			
Copper	58.4	9.59	"	47.9	14.7	91.1	75-125			
Lead	17.2	9.59	"	4.79	12.0	107	75-125			
Nickel	19.3	9.59	"	4.79	16.0	68.2	75-125			QM-07
Selenium	4.84	0.0959	"	4.79	0.191	96.9	75-125			
Silver	4.84	0.0959	"	4.79	0.0673	99.5	75-125			
Zinc	95.5	95.9	"	47.9	56.5	81.3	75-125			
Matrix Spike Dup (B2K0302-MSD1)		Source: Y211018-08			Prepared: 11/03/2022 Analyzed: 11/03/2022					
Arsenic	9.70	0.0993	mg/kg	4.96	4.77	99.3	75-125	12.6	20	
Barium	657	9.93	"	496	165	99.1	75-125	4.76	20	
Cadmium	5.41	0.0993	"	4.96	0.276	103	75-125	3.68	20	
Copper	63.9	9.93	"	49.6	14.7	99.1	75-125	9.01	20	
Lead	17.2	9.93	"	4.96	12.0	105	75-125	0.349	20	
Nickel	20.4	9.93	"	4.96	16.0	88.7	75-125	5.71	20	
Selenium	4.80	0.0993	"	4.96	0.191	92.8	75-125	0.779	20	
Silver	5.26	0.0993	"	4.96	0.0673	105	75-125	8.42	20	
Zinc	105	99.3	"	49.6	56.5	96.8	75-125	9.09	20	

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 B2K0407 - Saturated Paste Metals

Blank (B2K0407-BLK1)

Prepared: 11/04/2022 Analyzed: 11/08/2022

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

Duplicate (B2K0407-DUP1)

Source: Y211018-13

Prepared: 11/04/2022 Analyzed: 11/08/2022

Calcium PPM	37.2	10.0	mg/L	38.2	2.72	50
SAR	0.00		SAR	4.01	200	200
Magnesium PPM	16.5	10.0	mg/L	17.1	3.49	50
Sodium PPM	115	10.0	"	119	2.86	50

Batch B2K0411 - DTPA Sorbitol Preparation

Blank (B2K0411-BLK1)

Prepared: 11/04/2022 Analyzed: 11/07/2022

Boron	ND	0.100	mg/L
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Duplicate (B2K0411-DUP1)

Source: Y211018-21

Prepared: 11/04/2022 Analyzed: 11/07/2022

Boron	0.543	0.100	mg/L	0.414	26.9	50
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Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

Saturated Paste - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2K0417 - NO PREP										
Duplicate (B2K0417-DUP1)		Source: Y211018-13			Prepared: 11/04/2022 Analyzed: 11/08/2022					
pH	8.32		pH Units		8.34			0.240	25	
Batch B2K0422 - Default Prep GenChem										
Blank (B2K0422-BLK1)		Prepared: 11/04/2022 Analyzed: 11/08/2022								
Specific Conductance (EC)	ND	0.00500	mmhos/cm							
Duplicate (B2K0422-DUP1)		Source: Y211018-13			Prepared: 11/04/2022 Analyzed: 11/08/2022					
Specific Conductance (EC)	0.920	0.00500	mmhos/cm		0.940			2.20	25	

Origins Laboratory, Inc.



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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 L646823 - 3550B

MSD (L 85866-MSD-L646823)		Source: 85866			Prepared: 11/03/2022 Analyzed: 11/04/2022					
Chrysene	0.111	0.00067	mg/Kg	0.166	<0.000624	66.8	30-130	0.9	30	
Naphthalene	0.0895	0.00201	"	0.166	<0.00145	53.9	30-130	0.3	30	
2-Methylnaphthalene	0.0874	0.00201	"	0.166	<0.00194	52.6	30-130	2	30	
Indeno(1,2,3-cd)pyrene	0.136	0.00067	"	0.166	0.00179	80.8	30-130	1.4	30	
Pyrene	0.107	0.00067	"	0.166	<0.000643	64.4	30-130	0.9	30	
Fluorene	0.11	0.00067	"	0.166	<0.000286	66.2	30-130	0	30	
Fluoranthene	0.108	0.00067	"	0.166	<0.000394	65	30-130	7.1	30	
Dibenz(a,h)anthracene	0.138	0.00067	"	0.166	0.0015	82.2	30-130	3.6	30	
Benzo(k)fluoranthene	0.111	0.00067	"	0.166	0.000893	66.3	30-130	1.7	30	
Benzo(b)fluoranthene	0.131	0.00067	"	0.166	0.00123	78.1	30-130	17.4	30	
Benzo(a)pyrene	0.123	0.00067	"	0.166	<0.000468	74	30-130	0.8	30	
Benzo(a)anthracene	0.105	0.00067	"	0.166	<0.000493	63.2	30-130	1.9	30	
Anthracene	0.102	0.00067	"	0.166	<0.000334	61.4	30-130	8.4	30	
1-Methylnaphthalene	0.0968	0.00201	"	0.166	<0.00109	58.3	30-130	9.4	30	
Acenaphthene	0.095	0.00067	"	0.166	<0.000304	57.2	30-130	1.1	30	
Surrogate: Nitrobenzene-d5	48.1		"	0.332	163	48.1	29-110			
Surrogate: 4-Terphenyl-d14	65		"	0.332	215	65	33-122			
Surrogate: 2-Fluorobiphenyl	50.9		"	0.332	176	50.9	33-115			

MS (L 85866-MS-L646823)		Source: 85866			Prepared: 11/03/2022 Analyzed: 11/04/2022					
Chrysene	0.11	0.00067	mg/Kg	0.164	<0.000624	67	30-130			
Benzo(k)fluoranthene	0.113	0.00067	"	0.164	0.000893	68.3	30-130			
2-Methylnaphthalene	0.0856	0.00201	"	0.164	<0.00194	52.1	30-130			
1-Methylnaphthalene	0.0881	0.00201	"	0.164	<0.00109	53.7	30-130			
Acenaphthene	0.0961	0.00067	"	0.164	<0.000304	58.5	30-130			
Anthracene	0.111	0.00067	"	0.164	<0.000334	67.6	30-130			
Benzo(a)anthracene	0.103	0.00067	"	0.164	<0.000493	62.8	30-130			

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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 L646823 - 3550B

MS (L 85866-MS-L646823)		Source: 85866			Prepared: 11/03/2022 Analyzed: 11/04/2022					
Fluoranthene	0.116	0.00067	mg/Kg	0.164	<0.000394	70.7	30-130			
Benzo(b)fluoranthene	0.11	0.00067	"	0.164	0.00123	66.3	30-130			
Dibenz(a,h)anthracene	0.133	0.00067	"	0.164	0.0015	80.1	30-130			
Fluorene	0.11	0.00067	"	0.164	<0.000286	67	30-130			
Indeno(1,2,3-cd)pyrene	0.134	0.00067	"	0.164	0.00179	80.6	30-130			
Naphthalene	0.0898	0.00201	"	0.164	<0.00145	54.7	30-130			
Pyrene	0.108	0.00067	"	0.164	<0.000643	65.8	30-130			
Benzo(a)pyrene	0.124	0.00067	"	0.164	<0.000468	75.6	30-130			
Surrogate: 2-Fluorobiphenyl	52.5		"	0.329	176	52.5	33-115			
Surrogate: 4-Terphenyl-d14	65.6		"	0.329	215	65.6	33-122			
Surrogate: Nitrobenzene-d5	45.5		"	0.329	163	45.5	29-110			

LCS (LCS-L646823)		Prepared: 11/03/2022 Analyzed: 11/04/2022								
Benzo(b)fluoranthene	0.103	0.00067	mg/Kg	0.167		61.6	30-130			
1-Methylnaphthalene	0.0982	0.00201	"	0.167		58.8	30-130			
Chrysene	0.108	0.00067	"	0.167		64.6	30-130			
2-Methylnaphthalene	0.095	0.00201	"	0.167		56.8	30-130			
Acenaphthene	0.0983	0.00067	"	0.167		58.8	30-130			
Anthracene	0.0962	0.00067	"	0.167		57.6	30-130			
Benzo(a)anthracene	0.104	0.00067	"	0.167		62.2	30-130			
Benzo(a)pyrene	0.119	0.00067	"	0.167		71.2	30-130			
Benzo(k)fluoranthene	0.106	0.00067	"	0.167		63.4	30-130			
Dibenz(a,h)anthracene	0.11	0.00067	"	0.167		65.8	30-130			
Fluoranthene	0.111	0.00067	"	0.167		66.4	30-130			
Fluorene	0.101	0.00067	"	0.167		60.4	30-130			
Indeno(1,2,3-cd)pyrene	0.112	0.00067	"	0.167		67	30-130			
Naphthalene	0.0942	0.00201	"	0.167		56.4	30-130			

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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

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 L646823 - 3550B

LCS (LCS-L646823)

Prepared: 11/03/2022 Analyzed: 11/04/2022

Pyrene	0.111	0.00067	mg/Kg	0.167		66.4	30-130			
Surrogate: 4-Terphenyl-d14	65.7		"	0.333		65.7	33-122			
Surrogate: Nitrobenzene-d5	58.2		"	0.333		58.2	29-110			
Surrogate: 2-Fluorobiphenyl	60		"	0.333		60	33-115			

LRB (LRB-L646823)

Prepared: 11/03/2022 Analyzed: 11/04/2022

Fluoranthene	ND	0.00067	mg/Kg				-			
Dibenz(a,h)anthracene	ND	0.00067	"				-			
Chrysene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Pyrene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
2-Methylnaphthalene	ND	0.00201	"				-			
Anthracene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
Naphthalene	ND	0.00201	"				-			
Surrogate: 4-Terphenyl-d14	60.3		"	0.333		60.3	33-122			
Surrogate: 2-Fluorobiphenyl	53.4		"	0.333		53.4	33-115			
Surrogate: Nitrobenzene-d5	48.9		"	0.333		48.9	29-110			

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KP Kauffman Co. Inc.
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Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

Total Metals by 7196A - Quality Control Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L647282 -										
DUP (L 85889-DUP)	Source: 85889				Prepared: Analyzed: 11/05/2022					
Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
MS (L 85889-MS)	Source: 85889				Prepared: Analyzed: 11/05/2022					
Chromium, Hexavalent	51.2	2.58	mg/Kg	41.2	< 0.252	124	75-125			
MSD (L 85889-MSD)	Source: 85889				Prepared: Analyzed: 11/05/2022					
Chromium, Hexavalent	672	50	mg/Kg	719	<24.4	93	75-125			
LCS (LCS)					Prepared: Analyzed: 11/05/2022					
Chromium, Hexavalent	6.85	0.5	mg/Kg	8		86	75-125			
LRB (LRB)					Prepared: Analyzed: 11/05/2022					
Chromium, Hexavalent	ND	0.5	mg/Kg							

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KP Kauffman Co. Inc.
1700 Lincoln St #4550
Denver CO 80203

Levi Kirk
Project Number: [none]
Project: Koch 41-6 Flowline

Notes and Definitions

U Sample is Non-Detect.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

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

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

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