

June 19, 2024

**KP Kauffman Co. Inc.**

**John Peterson**

**1700 Lincoln St #4550**

**Denver CO 80203**

**Project Name - Klein 24-8 Flowline**

**Project Number - [none]**

Attached are your analytical results for Klein 24-8 Flowline received by Origins Laboratory, Inc. June 03, 2024. This project is associated with Origins project number Y406011-01.

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

John Peterson  
Project Number: [none]  
Project: Klein 24-8 Flowline

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-4@0'	Y406011-01	Soil	June 3, 2024 12:15	06/03/2024 13:47
SS-5@0'	Y406011-02	Soil	June 3, 2024 12:20	06/03/2024 13:47
SS-6@0'	Y406011-03	Soil	June 3, 2024 12:25	06/03/2024 13:47

Origins Laboratory, Inc.



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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: Y406010 Client: KPK  
 Client Project ID: Johnson I  
 Checklist Completed by: EHD Shipped Via: HD  
 Date/time completed: 6/13/24 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: N/A  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 11316 °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C (Describe) \_\_\_\_\_ °C  
 Thermometer ID: 7005

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

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

Reviewed by (Project Manager) EHD Date/Time Reviewed 6/13/24

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 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

**SS-4@0'**  
**6/3/2024 12:15:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y406011-01 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.281		0.0998	mg/L	1	B4F0520	06/05/2024	06/06/2024	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	74.6		25.0	mg/kg	1	B4F0329	06/03/2024	06/06/2024	
Residual Range Organics (C28-C40)	225		100	"	"	"	"	"	

Surrogate: o-Terphenyl	75.9 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B4F0337	06/03/2024	06/06/2024	Ua
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	Ua
Benzene	ND		0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND		0.00200	"	"	"	"	"	Ua
Toluene	ND		0.00200	"	"	"	"	"	Ua
Xylenes, total	ND		0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	Ua

Surrogate: 1,2-Dichloroethane-d4	99.4 %		70-130			"	"	"	
Surrogate: Toluene-d8	101 %		70-130			"	"	"	

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SS-4@0'

6/3/2024 12:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-01 (Soil)

**GBTEX+TMBs by 8260D**

Surrogate: 4-Bromofluorobenzene 110 % 70-130 B4F03 37 06/03/2024 06/06/2024

**Metals by Saturated Paste by EPA 6010**

Calcium	2.67	0.499	meq/L	10	[CALC]	06/06/2024	06/07/2024
Magnesium	ND	0.823	"	"	"	"	"
Sodium	1.76	0.435	"	"	"	"	"

**PAH by EPA 8270E**

1-Methylnaphthalene	0.002	0.002	mg/kg	1	B4F0721	06/07/2024	06/16/2024
2-Methylnaphthalene	0.003	0.002	"	"	"	"	"
Acenaphthene	ND	0.020	"	"	"	"	Ua
Anthracene	ND	0.020	"	"	"	"	Ua
Benzo (a) anthracene	ND	0.005	"	"	"	"	Ua
Benzo (a) pyrene	ND	0.020	"	"	"	"	Ua
Benzo (b) fluoranthene	ND	0.020	"	"	"	"	Ua
Benzo (k) fluoranthene	ND	0.020	"	"	"	"	Ua
Chrysene	ND	0.020	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND	0.020	"	"	"	"	Ua
Fluoranthene	ND	0.020	"	"	"	"	Ua
Fluorene	ND	0.020	"	"	"	"	Ua

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**SS-4@0'**

**6/3/2024 12:15:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y406011-01 (Soil)**

**PAH by EPA 8270E**

Indeno (1,2,3-cd) pyrene	ND		0.020	mg/kg	1	B4F0721	06/07/2024	06/16/2024	Ua
Naphthalene	ND		0.002	"	"	"	"	"	Ua
Pyrene	ND		0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	108 %		60-130			"	"	"	
Surrogate: Anthracene-d10	103 %		60-130			"	"	"	
Surrogate: Pyrene-d10	89.5 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	102 %		60-130			"	"	"	

**pH in Soil by 9045D**

pH	8.36			pH Units	1	B4F0623	06/06/2024	06/07/2024	
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**SAR by 20B Saturated Paste**

SAR	1.36		0.0100	SAR	1	B4F0612	06/06/2024	06/07/2024	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.525		0.00500	mmhos/cm	1	B4F0623	06/06/2024	06/07/2024	
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**Table 915 metals by EPA 6020B**

Arsenic	1.42		0.259	mg/kg	10	B4F0319	06/03/2024	06/07/2024	
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SS-4@0'

6/3/2024 12:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-01 (Soil)

**Table 915 metals by EPA 6020B**

Barium	48.7		8.92	mg/kg	10	B4F0319	06/03/2024	06/07/2024	
Cadmium	0.117		0.0892	"	"	"	"	"	
Copper	ND		8.92	"	"	"	"	"	
Lead	7.66		0.892	"	"	"	"	"	
Nickel	3.90		0.892	"	"	"	"	"	
Selenium	ND		0.232	"	"	"	"	"	
Silver	ND		0.0892	"	"	"	"	"	
Zinc	ND		33.0	"	"	"	"	"	

**Total Metals 7196A**

Hexavalent Chromium	ND	0.111	0.277	mg/kg dry	1	2625460	06/12/2024	06/13/2024	U
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 Denver CO 80203

John Peterson  
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**SS-5@0'**

**6/3/2024 12:20:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y406011-02 (Soil)**

**Boron (DTPA Sorbitol)**

Boron	0.805		0.0990	mg/L	1	B4F0520	06/05/2024	06/06/2024	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND		25.0	mg/kg	1	B4F0329	06/03/2024	06/06/2024	Ua
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	85.2 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B4F0337	06/03/2024	06/06/2024	Ua
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	Ua
Benzene	ND		0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND		0.00200	"	"	"	"	"	Ua
Toluene	ND		0.00200	"	"	"	"	"	Ua
Xylenes, total	ND		0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	Ua

Surrogate: 1,2-Dichloroethane-d4	102 %		70-130			"	"	"	
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 Project: Klein 24-8 Flowline

SS-5@0'

6/3/2024 12:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-02 (Soil)

**GBTEX+TMBs by 8260D**

Surrogate: Toluene-d8	100 %		70-130			B4F03 37	06/03/2024	06/06/2024	
Surrogate: 4-Bromofluorobenzene	111 %		70-130			"	"	"	

**Metals by Saturated Paste by EPA 6010**

Calcium	4.97		0.499	meq/L	10	[CALC]	06/06/2024	06/07/2024	
Magnesium	1.22		0.823	"	"	"	"	"	
Sodium	ND		0.435	"	"	"	"	"	

**PAH by EPA 8270E**

1-Methylnaphthalene	ND		0.002	mg/kg	1	B4F0721	06/07/2024	06/16/2024	Ua
2-Methylnaphthalene	ND		0.002	"	"	"	"	"	Ua
Acenaphthene	ND		0.020	"	"	"	"	"	Ua
Anthracene	ND		0.020	"	"	"	"	"	Ua
Benzo (a) anthracene	ND		0.005	"	"	"	"	"	Ua
Benzo (a) pyrene	ND		0.020	"	"	"	"	"	Ua
Benzo (b) fluoranthene	ND		0.020	"	"	"	"	"	Ua
Benzo (k) fluoranthene	ND		0.020	"	"	"	"	"	Ua
Chrysene	ND		0.020	"	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	Ua
Fluoranthene	ND		0.020	"	"	"	"	"	Ua

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John Peterson  
 Project Number: [none]  
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**SS-5@0'**

**6/3/2024 12:20:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y406011-02 (Soil)**

**PAH by EPA 8270E**

Fluorene	ND		0.020	mg/kg	1	B4F0721	06/07/2024	06/16/2024	Ua
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	Ua
Naphthalene	ND		0.002	"	"	"	"	"	Ua
Pyrene	ND		0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	107 %		60-130			"	"	"	
Surrogate: Anthracene-d10	102 %		60-130			"	"	"	
Surrogate: Pyrene-d10	91.4 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	98.7 %		60-130			"	"	"	

**pH in Soil by 9045D**

pH	8.13			pH Units	1	B4F0623	06/06/2024	06/07/2024	
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**SAR by 20B Saturated Paste**

SAR	0.0129		0.0100	SAR	1	B4F0612	06/06/2024	06/07/2024	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.652		0.00500	mmhos/cm	1	B4F0623	06/06/2024	06/07/2024	
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**Table 915 metals by EPA 6020B**

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 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

SS-5@0'

6/3/2024 12:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-02 (Soil)

**Table 915 metals by EPA 6020B**

Arsenic	1.58		0.264	mg/kg	10	B4F0319	06/03/2024	06/07/2024	
Barium	50.4		9.11	"	"	"	"	"	
Cadmium	0.165		0.0911	"	"	"	"	"	
Copper	ND		9.11	"	"	"	"	"	
Lead	7.96		0.911	"	"	"	"	"	
Nickel	4.42		0.911	"	"	"	"	"	
Selenium	ND		0.237	"	"	"	"	"	
Silver	ND		0.0911	"	"	"	"	"	
Zinc	ND		33.7	"	"	"	"	"	

**Total Metals 7196A**

Hexavalent Chromium	ND	0.128	0.319	mg/kg dry	1	2625460	06/12/2024	06/13/2024	U
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 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

SS-6@0'

6/3/2024 12:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-03 (Soil)

**Boron (DTPA Sorbitol)**

Boron	0.351		0.0987	mg/L	1	B4F0520	06/05/2024	06/06/2024	
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**DRO/ORO by EPA 8015D**

Diesel (C10-C28)	ND		25.0	mg/kg	1	B4F0329	06/03/2024	06/06/2024	Ua
Residual Range Organics (C28-C40)	ND		100	"	"	"	"	"	Ua

Surrogate: o-Terphenyl	86.3 %		50-150			"	"	"	
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**GBTEX+TMBs by 8260D**

1,2,4-Trimethylbenzene	ND		0.00200	mg/kg	1	B4F0337	06/03/2024	06/06/2024	Ua
1,3,5-Trimethylbenzene	ND		0.00200	"	"	"	"	"	Ua
Benzene	ND		0.00200	"	"	"	"	"	Ua
Ethylbenzene	ND		0.00200	"	"	"	"	"	Ua
Toluene	ND		0.00200	"	"	"	"	"	Ua
Xylenes, total	ND		0.00200	"	"	"	"	"	Ua
Gasoline Range Hydrocarbons	ND		0.200	"	"	"	"	"	Ua

Surrogate: 1,2-Dichloroethane-d4	102 %		70-130			"	"	"	
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6/3/2024 12:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-03 (Soil)

**GBTEX+TMBs by 8260D**

Surrogate: Toluene-d8	101 %		70-130			B4F03 37	06/03/2024	06/06/2024	
Surrogate: 4-Bromofluorobenzene	109 %		70-130			"	"	"	

**Metals by Saturated Paste by EPA 6010**

Calcium	4.18		0.499	meq/L	10	[CALC]	06/06/2024	06/07/2024	
Magnesium	0.893		0.823	"	"	"	"	"	
Sodium	ND		0.435	"	"	"	"	"	

**PAH by EPA 8270E**

1-Methylnaphthalene	ND		0.002	mg/kg	1	B4F0721	06/07/2024	06/16/2024	Ua
2-Methylnaphthalene	ND		0.002	"	"	"	"	"	Ua
Acenaphthene	ND		0.020	"	"	"	"	"	Ua
Anthracene	ND		0.020	"	"	"	"	"	Ua
Benzo (a) anthracene	0.007		0.005	"	"	"	"	"	
Benzo (a) pyrene	ND		0.020	"	"	"	"	"	Ua
Benzo (b) fluoranthene	ND		0.020	"	"	"	"	"	Ua
Benzo (k) fluoranthene	ND		0.020	"	"	"	"	"	Ua
Chrysene	ND		0.020	"	"	"	"	"	Ua
Dibenz (a,h) anthracene	ND		0.020	"	"	"	"	"	Ua
Fluoranthene	ND		0.020	"	"	"	"	"	Ua

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John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

**SS-6@0'**

**6/3/2024 12:25:00PM**

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y406011-03 (Soil)**

**PAH by EPA 8270E**

Fluorene	ND		0.020	mg/kg	1	B4F0721	06/07/2024	06/16/2024	Ua
Indeno (1,2,3-cd) pyrene	ND		0.020	"	"	"	"	"	Ua
Naphthalene	ND		0.002	"	"	"	"	"	Ua
Pyrene	ND		0.020	"	"	"	"	"	Ua

Surrogate: Fluorene-d10	107 %		60-130			"	"	"	
Surrogate: Anthracene-d10	101 %		60-130			"	"	"	
Surrogate: Pyrene-d10	95.4 %		60-130			"	"	"	
Surrogate: Benzo (a) pyrene-d12	100 %		60-130			"	"	"	

**pH in Soil by 9045D**

pH	7.94			pH Units	1	B4F0623	06/06/2024	06/07/2024	
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**SAR by 20B Saturated Paste**

SAR	ND		0.0100	SAR	1	B4F0612	06/06/2024	06/07/2024	
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**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.580		0.00500	mmhos/cm	1	B4F0623	06/06/2024	06/07/2024	
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**Table 915 metals by EPA 6020B**

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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

SS-6@0'

6/3/2024 12:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
 Y406011-03 (Soil)

**Table 915 metals by EPA 6020B**

Arsenic	1.63		0.280	mg/kg	10	B4F0319	06/03/2024	06/07/2024	
Barium	57.9		9.66	"	"	"	"	"	
Cadmium	0.192		0.0966	"	"	"	"	"	
Copper	ND		9.66	"	"	"	"	"	
Lead	10.2		0.966	"	"	"	"	"	
Nickel	4.44		0.966	"	"	"	"	"	
Selenium	ND		0.251	"	"	"	"	"	
Silver	ND		0.0966	"	"	"	"	"	
Zinc	ND		35.8	"	"	"	"	"	

**Total Metals 7196A**

Hexavalent Chromium	ND	0.139	0.348	mg/kg dry	1	2625460	06/12/2024	06/13/2024	U
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KP Kauffman Co. Inc.  
 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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
<b>Batch B4F0329 - EPA 3550B</b>										
<b>Blank (B4F0329-BLK1)</b>										
					Prepared: 06/03/2024 Analyzed: 06/06/2024					
Diesel (C10-C28)	ND	25.0	mg/kg							Ua
Residual Range Organics (C28-C40)	ND	100	"							Ua
Surrogate: o-Terphenyl	23		"	24.9		91.2	50-150			

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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0329 - EPA 3550B**

**LCS (B4F0329-BS1)**

Prepared: 06/03/2024 Analyzed: 06/06/2024

Diesel (C10-C28)	939	50.0	mg/kg	1000		93.9	70-130			
Residual Range Organics (C28-C40)	1050	200	"	1000		105	70-130			
Surrogate: o-Terphenyl	68		"	49.8		136	50-150			

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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0329 - EPA 3550B

Matrix Spike (B4F0329-MS1)	Source: Y405904-01			Prepared: 06/03/2024 Analyzed: 06/06/2024						
Diesel (C10-C28)	1000	50.0	mg/kg	1000	ND	100	70-130			
Residual Range Organics (C28-C40)	1070	200	"	1000	ND	107	70-130			
Surrogate: o-Terphenyl	41		"	49.8		82.8	50-150			

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 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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
<b>Batch B4F0329 - EPA 3550B</b>										
<b>Matrix Spike Dup (B4F0329-MSD1)</b>					<b>Source: Y405904-01</b>					Prepared: 06/03/2024 Analyzed: 06/06/2024
Diesel (C10-C28)	990	50.0	mg/kg	1000	ND	99.0	70-130	1.37	35	
Residual Range Organics (C28-C40)	1090	200	"	1000	ND	109	70-130	1.92	35	
Surrogate: o-Terphenyl	53		"	49.8		107	50-150			

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John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0337 - EPA 5030 (soil)**

**Blank (B4F0337-BLK1)**

Prepared: 06/03/2024 Analyzed: 06/05/2024

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							Ua
1,3,5-Trimethylbenzene	ND	0.00200	"							Ua
Benzene	ND	0.00200	"							Ua
Ethylbenzene	ND	0.00200	"							Ua
Naphthalene	ND	0.00380	"							Ua
Toluene	ND	0.00200	"							Ua
Xylenes, total	ND	0.00200	"							Ua
Gasoline Range Hydrocarbons	ND	0.200	"							Ua
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125	96.7		70-130			
Surrogate: Toluene-d8	0.13		"	0.125	102		70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125	106		70-130			

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 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0337 - EPA 5030 (soil)

**LCS (B4F0337-BS1)**

Prepared: 06/03/2024 Analyzed: 06/05/2024

1,2,4-Trimethylbenzene	0.0982	0.00200	mg/kg	0.100		98.2	70-130			
1,3,5-Trimethylbenzene	0.0967	0.00200	"	0.100		96.7	70-130			
Benzene	0.0881	0.00200	"	0.100		88.1	70-130			
Ethylbenzene	0.0847	0.00200	"	0.100		84.7	70-130			
Naphthalene	0.0958	0.00380	"	0.100		95.8	70-130			
Toluene	0.0887	0.00200	"	0.100		88.7	70-130			
o-Xylene	0.0919	0.00200	"	0.100		91.9	70-130			
m,p-Xylene	0.178	0.00400	"	0.200		89.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		98.0	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		99.0	70-130			

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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0337 - EPA 5030 (soil)

Matrix Spike (B4F0337-MS1)	Source: Y406002-01			Prepared: 06/03/2024 Analyzed: 06/05/2024						
1,2,4-Trimethylbenzene	0.0985	0.00200	mg/kg	0.100	ND	98.5	70-130			
1,3,5-Trimethylbenzene	0.0978	0.00200	"	0.100	ND	97.8	70-130			
Benzene	0.0963	0.00200	"	0.100	ND	96.3	70-130			
Ethylbenzene	0.0905	0.00200	"	0.100	0.000600	89.9	70-130			
Naphthalene	0.103	0.00380	"	0.100	0.00124	102	70-130			
Toluene	0.0940	0.00200	"	0.100	ND	94.0	70-130			
o-Xylene	0.0978	0.00200	"	0.100	ND	97.8	70-130			
m,p-Xylene	0.190	0.00400	"	0.200	ND	94.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		100	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		100	70-130			

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John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0337 - EPA 5030 (soil)

Matrix Spike Dup (B4F0337-MSD1)	Source: Y406002-01			Prepared: 06/03/2024 Analyzed: 06/06/2024						
1,2,4-Trimethylbenzene	0.0844	0.00200	mg/kg	0.100	ND	84.4	70-130	15.4	20	
1,3,5-Trimethylbenzene	0.0857	0.00200	"	0.100	ND	85.7	70-130	13.2	20	
Benzene	0.0731	0.00200	"	0.100	ND	73.1	70-130	27.3	20	QR-02
Ethylbenzene	0.0856	0.00200	"	0.100	0.000600	85.0	70-130	5.54	20	
Naphthalene	0.118	0.00380	"	0.100	0.00124	117	70-130	13.1	20	
Toluene	0.0770	0.00200	"	0.100	ND	77.0	70-130	19.9	20	
o-Xylene	0.0857	0.00200	"	0.100	ND	85.7	70-130	13.2	20	
m,p-Xylene	0.174	0.00400	"	0.200	ND	86.8	70-130	8.74	20	
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		98.2	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.16		"	0.125		127	70-130			

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 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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 B4F0319 - EPA 3050B**

**Blank (B4F0319-BLK1)**

Prepared: 06/03/2024 Analyzed: 06/07/2024

Arsenic	ND	0.290	mg/kg							
Barium	ND	10.0	"							
Cadmium	ND	0.100	"							
Copper	ND	10.0	"							
Lead	ND	1.00	"							
Nickel	ND	1.00	"							
Selenium	ND	0.260	"							
Silver	ND	0.100	"							
Zinc	ND	37.0	"							

**LCS (B4F0319-BS1)**

Prepared: 06/03/2024 Analyzed: 06/07/2024

Arsenic	5.97	0.290	mg/kg	5.00		119	80-120			
Barium	581	10.0	"	500		116	80-120			
Cadmium	6.00	0.100	"	5.00		120	80-120			
Copper	56.0	10.0	"	50.0		112	80-120			
Lead	5.75	1.00	"	5.00		115	80-120			
Nickel	5.74	1.00	"	5.00		115	80-120			
Selenium	10.6	0.260	"	9.50		112	80-120			
Silver	5.91	0.100	"	5.00		118	80-120			
Zinc	56.7	37.0	"	50.0		113	80-120			

**Matrix Spike (B4F0319-MS1)**

Source: Y405909-01

Prepared: 06/03/2024 Analyzed: 06/07/2024

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 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 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
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**Batch B4F0319 - EPA 3050B**

<b>Matrix Spike (B4F0319-MS1)</b>		<b>Source: Y405909-01</b>			Prepared: 06/03/2024 Analyzed: 06/07/2024					
Arsenic	7.68	0.269	mg/kg	4.63	2.50	112	75-125			
Barium	640	9.26	"	463	91.7	118	75-125			
Cadmium	5.82	0.0926	"	4.63	0.175	122	75-125			
Copper	64.8	9.26	"	46.3	12.7	113	75-125			
Lead	21.1	0.926	"	4.63	8.15	279	75-125			QM-07
Nickel	18.5	0.926	"	4.63	13.2	115	75-125			
Selenium	10.4	0.241	"	8.80	0.163	117	75-125			
Silver	5.49	0.0926	"	4.63	0.0739	117	75-125			
Zinc	100	34.3	"	46.3	44.0	121	75-125			

<b>Matrix Spike Dup (B4F0319-MSD1)</b>		<b>Source: Y405909-01</b>			Prepared: 06/03/2024 Analyzed: 06/07/2024					
Arsenic	7.54	0.284	mg/kg	4.89	2.50	103	75-125	1.84	20	
Barium	623	9.78	"	489	91.7	109	75-125	2.66	20	
Cadmium	6.03	0.0978	"	4.89	0.175	120	75-125	3.62	20	
Copper	63.2	9.78	"	48.9	12.7	103	75-125	2.52	20	
Lead	13.6	0.978	"	4.89	8.15	111	75-125	43.3	20	QM-07, QR-DUP
Nickel	17.6	0.978	"	4.89	13.2	90.9	75-125	4.86	20	
Selenium	9.63	0.254	"	9.30	0.163	102	75-125	8.17	20	
Silver	5.55	0.0978	"	4.89	0.0739	112	75-125	1.13	20	
Zinc	95.1	36.2	"	48.9	44.0	104	75-125	5.22	20	

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 1700 Lincoln St #4550  
 Denver CO 80203

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4F0721 - EPA 3580**

**Blank (B4F0721-BLK1)**

Prepared: 06/07/2024 Analyzed: 06/16/2024

1-Methylnaphthalene	ND	0.002	mg/kg							Ua
2-Methylnaphthalene	ND	0.002	"							Ua
Acenaphthene	ND	0.020	"							Ua
Anthracene	ND	0.020	"							Ua
Benzo (a) anthracene	ND	0.005	"							Ua
Benzo (a) pyrene	ND	0.020	"							Ua
Benzo (b) fluoranthene	ND	0.020	"							Ua
Benzo (g,h,i) perylene	ND	0.020	"							Ua
Benzo (k) fluoranthene	ND	0.020	"							Ua
Chrysene	ND	0.020	"							Ua
Dibenz (a,h) anthracene	ND	0.020	"							Ua
Fluoranthene	ND	0.020	"							Ua
Fluorene	ND	0.020	"							Ua
Indeno (1,2,3-cd) pyrene	ND	0.020	"							Ua
Naphthalene	ND	0.002	"							Ua
Phenanthrene	ND	0.020	"							Ua
Pyrene	ND	0.020	"							Ua
Surrogate: Fluorene-d10	220		ug/kg	200		108	60-130			
Surrogate: Anthracene-d10	200		"	200		101	60-130			
Surrogate: Pyrene-d10	200		"	200		98.0	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			

**LCS (B4F0721-BS1)**

Prepared: 06/07/2024 Analyzed: 06/16/2024

1-Methylnaphthalene	0.187	0.002	mg/kg	0.200		93.3	70-130			
2-Methylnaphthalene	0.185	0.002	"	0.200		92.5	70-130			
Acenaphthene	0.189	0.020	"	0.200		94.3	70-130			
Anthracene	0.189	0.020	"	0.200		94.4	70-130			

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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4F0721 - EPA 3580**

**LCS (B4F0721-BS1)**

Prepared: 06/07/2024 Analyzed: 06/16/2024

Benzo (a) anthracene	0.224	0.005	mg/kg	0.200		112	70-130			
Benzo (a) pyrene	0.212	0.020	"	0.200		106	70-130			
Benzo (b) fluoranthene	0.184	0.020	"	0.200		91.9	70-130			
Benzo (g,h,i) perylene	0.174	0.020	"	0.200		86.9	70-130			
Benzo (k) fluoranthene	0.195	0.020	"	0.200		97.6	70-130			
Chrysene	0.203	0.020	"	0.200		102	70-130			
Dibenz (a,h) anthracene	0.175	0.020	"	0.200		87.4	70-130			
Fluoranthene	0.207	0.020	"	0.200		103	70-130			
Fluorene	0.198	0.020	"	0.200		99.1	70-130			
Indeno (1,2,3-cd) pyrene	0.219	0.020	"	0.200		109	70-130			
Naphthalene	0.187	0.002	"	0.200		93.4	70-130			
Phenanthrene	0.184	0.020	"	0.200		91.8	70-130			
Pyrene	0.189	0.020	"	0.200		94.3	70-130			
Surrogate: Fluorene-d10	210		ug/kg	200		107	60-130			
Surrogate: Anthracene-d10	200		"	200		99.8	60-130			
Surrogate: Pyrene-d10	200		"	200		99.0	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		102	60-130			

**Matrix Spike (B4F0721-MS1)**

Source: Y406004-01

Prepared: 06/07/2024 Analyzed: 06/16/2024

1-Methylnaphthalene	0.191	0.002	mg/kg	0.200	0.0005	95.0	70-130			
2-Methylnaphthalene	0.190	0.002	"	0.200	ND	95.1	70-130			
Acenaphthene	0.196	0.020	"	0.200	ND	98.1	70-130			
Anthracene	0.202	0.020	"	0.200	0.0007	101	70-130			
Benzo (a) anthracene	0.231	0.005	"	0.200	0.002	115	70-130			
Benzo (a) pyrene	0.251	0.020	"	0.200	0.001	125	70-130			
Benzo (b) fluoranthene	0.232	0.020	"	0.200	0.0005	116	70-130			
Benzo (g,h,i) perylene	0.193	0.020	"	0.200	0.002	95.4	70-130			

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

John Peterson  
 Project Number: [none]  
 Project: Klein 24-8 Flowline

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4F0721 - EPA 3580**

<b>Matrix Spike (B4F0721-MS1)</b>		<b>Source: Y406004-01</b>			Prepared: 06/07/2024 Analyzed: 06/16/2024					
Benzo (k) fluoranthene	0.248	0.020	mg/kg	0.200	ND	124	70-130			
Chrysene	0.210	0.020	"	0.200	0.002	104	70-130			
Dibenz (a,h) anthracene	0.180	0.020	"	0.200	0.006	87.3	70-130			
Fluoranthene	0.216	0.020	"	0.200	ND	108	70-130			
Fluorene	0.208	0.020	"	0.200	ND	104	70-130			
Indeno (1,2,3-cd) pyrene	0.236	0.020	"	0.200	0.004	116	70-130			
Naphthalene	0.192	0.002	"	0.200	0.002	94.9	70-130			
Phenanthrene	0.189	0.020	"	0.200	ND	94.6	70-130			
Pyrene	0.195	0.020	"	0.200	ND	97.4	70-130			
Surrogate: Fluorene-d10	210		ug/kg	200		107	60-130			
Surrogate: Anthracene-d10	200		"	200		100	60-130			
Surrogate: Pyrene-d10	200		"	200		97.8	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		98.6	60-130			

<b>Matrix Spike Dup (B4F0721-MSD1)</b>		<b>Source: Y406004-01</b>			Prepared: 06/07/2024 Analyzed: 06/16/2024					
1-Methylnaphthalene	0.192	0.002	mg/kg	0.200	0.0005	95.8	70-130	0.755	20	
2-Methylnaphthalene	0.193	0.002	"	0.200	ND	96.4	70-130	1.36	20	
Acenaphthene	0.197	0.020	"	0.200	ND	98.7	70-130	0.587	20	
Anthracene	0.209	0.020	"	0.200	0.0007	104	70-130	3.60	20	
Benzo (a) anthracene	0.236	0.005	"	0.200	0.002	117	70-130	2.24	20	
Benzo (a) pyrene	0.243	0.020	"	0.200	0.001	121	70-130	3.22	20	
Benzo (b) fluoranthene	0.209	0.020	"	0.200	0.0005	104	70-130	10.5	20	
Benzo (g,h,i) perylene	0.192	0.020	"	0.200	0.002	95.0	70-130	0.439	20	
Benzo (k) fluoranthene	0.228	0.020	"	0.200	ND	114	70-130	8.53	20	
Chrysene	0.213	0.020	"	0.200	0.002	106	70-130	1.69	20	
Dibenz (a,h) anthracene	0.193	0.020	"	0.200	0.006	93.4	70-130	6.57	20	
Fluoranthene	0.215	0.020	"	0.200	ND	107	70-130	0.476	20	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4F0721 - EPA 3580

Matrix Spike Dup (B4F0721-MSD1)	Source: Y406004-01			Prepared: 06/07/2024 Analyzed: 06/16/2024						
Fluorene	0.205	0.020	mg/kg	0.200	ND	102	70-130	1.59	20	
Indeno (1,2,3-cd) pyrene	0.197	0.020	"	0.200	0.004	96.4	70-130	18.1	20	
Naphthalene	0.194	0.002	"	0.200	0.002	96.3	70-130	1.43	20	
Phenanthrene	0.190	0.020	"	0.200	ND	95.2	70-130	0.609	20	
Pyrene	0.202	0.020	"	0.200	ND	101	70-130	3.66	20	
Surrogate: Fluorene-d10	210		ug/kg	200		107	60-130			
Surrogate: Anthracene-d10	200		"	200		101	60-130			
Surrogate: Pyrene-d10	200		"	200		101	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		98.7	60-130			

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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 B4F0520 - DTPA Sorbitol Preparation**

**Blank (B4F0520-BLK1)**

Prepared: 06/05/2024 Analyzed: 06/06/2024

Boron ND 0.100 mg/L

**Duplicate (B4F0520-DUP1)**

**Source: Y406005-02**

Prepared: 06/05/2024 Analyzed: 06/06/2024

Boron 0.876 0.101 mg/L 0.862 1.59 50

**Batch B4F0612 - Saturated Paste Metals**

**Blank (B4F0612-BLK1)**

Prepared: 06/06/2024 Analyzed: 06/07/2024

Calcium PPM ND 10.0 mg/L

SAR ND 0.0100 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

**Duplicate (B4F0612-DUP1)**

**Source: Y406006-08**

Prepared: 06/06/2024 Analyzed: 06/07/2024

SAR ND 0.0100 SAR 1.61 200

Calcium PPM 20.0 10.0 mg/L 21.2 5.76 50

Magnesium PPM 2.72 10.0 " 2.84 4.32 50

Sodium PPM 29.2 10.0 " 29.7 1.80 50

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 Project: Klein 24-8 Flowline

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B4F0623 - Saturated Paste pH/EC</b>										
<b>Blank (B4F0623-BLK1)</b>					Prepared: 06/06/2024 Analyzed: 06/07/2024					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							
<b>Duplicate (B4F0623-DUP1)</b>					<b>Source: Y406006-08</b> Prepared: 06/06/2024 Analyzed: 06/07/2024					
pH	8.42		pH Units		8.43			0.119	25	
Specific Conductance (EC)	0.271	0.00500	mmhos/cm		0.286			5.53	25	

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 Project Number: [none]  
 Project: Klein 24-8 Flowline

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 2625460 - SW846 3060A</b>										
<b>BLANK (1205759277-BLK)</b>					Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	ND	0.297	mg/kg				-			U
<b>LCS (1205759278-BKS)</b>					Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	2.76	0.281	mg/kg	2.81		98.2	80-120			
<b>DUP (1205759279 D)</b>					Source: 670258001 Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	ND	0.288	mg/kg dry		<0.115		0-50	N/A	50	U
<b>MS (1205759280 S)</b>					Source: 670258001 Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	2.20	0.288	mg/kg dry	2.88	<0.115	76	75-125			
<b>DUP (1205759281 D)</b>					Source: 670262005 Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	ND	0.252	mg/kg dry		<0.101		0-50	N/A	50	U
<b>MS (1205759282 S)</b>					Source: 670262005 Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	2.03	0.252	mg/kg dry	2.52	<0.101	77.1	75-125			
<b>ILCS (1205759283-ILCS)</b>					Prepared: 06/12/2024 Analyzed: 06/13/2024					
Hexavalent Chromium	5.49	0.272	mg/kg	5.63		97.6	80-120			

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John Peterson  
Project Number: [none]  
Project: Klein 24-8 Flowline

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### Notes and Definitions

Ua Sample is Non-Detect.

U Result not detected above the detection limit

QR-DUP RPD exceeds QC acceptance criteria, this indicates source sample is not homogenous.

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.

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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