Test Report

eANALYTICS
LABORATORY

May 21, 2021

Client:	Aspen Environmental Field Services
Project:	Summit Midstream / A-18E Soil Samples
Lab ID:	4116
Date Samples Received:	5/17/2021
Sample Condition:	The samples arrived intact and in appropriate sample containers. The samples were received within the temperature range specified in the test method(s) and/or with thermal preservation in process.
Comments:	pH analysis was performed on 5/20/21. The test items listed immediately below were analyzed by another laboratory. A separate report with those results will follow upon completion.

Analysis of:	Performed By:
Total Arsenic	McCampbell Analytical, Inc-Pittsburg CA

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.

Chris Dieken
QA Manager

Todd Rhea
Lab Manager

Chain of Custody

eANALYTICS LABORATORY

Chain of Custody Form

eANALYTICS LABORATORY

4130 Clydesdale Pkwy, Loveland, CO 80538 | Phone: (970) 667-6975 | Fax: (970) 669-0941 | www.eAnalyticsLab.com

CLIENT INFORMATION

(*New Clients please fill out completely)

Company:	Aspen Environmental F.S.	
Project:	Summit Midstream / A-18E Soil Samples	
Project Manager:	Criss Duncan	ccduncan@aspenefs.com
Sampler:	Mark Carlson	
Phone/Email:	(541) 891-2834	mcarlson@aspenefs.com
Address:	1685 17 Rd Loma, CO. 81524	
Billing Contact:	Lucy Baley	Lcullen@aspenefs.com

ANALYSIS INFORMATION

(Select analysis by checking box on corresponding sample line)

Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix (S) Soil (W) Water (V) Vapor (O) Other	Table 915-1 (Highlighted Sections) Form Attached	Other Analysis
1	Sample #1 Background - 2 Feet	5/12/21 1600 hrs	1	S	☒	
2	Sample #2 Background - 8 Feet	5/12/21 1600 hrs	1	S	☒	
3	Sample #3 North Wall	5/12/21 1600 hrs	1	S	☒	
4	Sample #4 South Wall	5/12/21 1600 hrs	1	S	☒	
5	Sample #5 East Wall	5/12/21 1600 hrs	1	S	☒	
6	Sample #6 West Wall	5/12/21 1600 hrs	1	S	☒	
7	Sample #7 Floor	5/12/21 1600 hrs	1	S	☒	

Comments:

Turnaround Time (Business Days)

TAT begins when sample is received by eANALYTICS

- ○ Normal (5-10 Days)
- ● 3 Day (1.25x)
- ○ 2 Day (1.5x)
- ○ 1 Day (2x)
- ○ Same Day (3x)

Rush analysis requires an extra charge. If possible please inform eANALYTICS in advance for rush analysis.

For eANALYTICS Use

Samples Received Intact	Yes / No	
Received Within Temperature Range (2-6°C)	Yes / No	
Sample Preservative	Ice	Acid
	None	Other

Record of Custody

Relinquished by: Grayson Lewis	Date	5/14/2021
Company: Summit Midstream	Time	8:00 AM
Received by: Austin Sparks	Date	5/14/2021
Company: Aspen Environmental Field Services	Time	8:00 AM
Relinquished by: Austin Sparks	Date	5/14/2021
Company: Aspen Environmental Field Services	Time	9:00 AM
Received by: [signature]	Date	5/17/21
Company: eANALYTICS	Time	3:00 AM PM

WO # 4116

eANALYTICS: Environmental testing made Easy

Page 1 of 1

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	BTEX/Select Volatile Cmpds/TPH-TVPH (C6-C10)	Method:	EPA8260

Sample Name	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	TPH-TVPH	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Date Sampled	Date Analyzed	Lab ID
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
Sample #1 Background - 2 Feet	<0.050	<0.050	<0.050	0.117	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 1
Sample #2 Background - 8 Feet	<0.050	<0.050	<0.050	<0.050	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 2
Sample #3 North Wall	<0.050	0.076	<0.050	0.162	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 3
Sample #4 South Wall	<0.050	<0.050	<0.050	0.097	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 4
Sample #5 East Wall	<0.050	<0.050	<0.050	<0.050	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 5
Sample #6 West Wall	<0.050	<0.050	<0.050	<0.050	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 6
Sample #7 Floor	<0.050	<0.050	<0.050	<0.050	<50.0	<0.050	<0.050	05/12/21	05/18/21	4116 7

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	TPH-TEPH (C10-C28)	Method:	EPA8015

Sample Name	TPH-TEPH mg/kg	Date Sampled	Date Analyzed	Lab ID
Sample #1 Background - 2 Feet	<50.0	05/12/21	05/18/21	4116 1
Sample #2 Background - 8 Feet	<50.0	05/12/21	05/18/21	4116 2
Sample #3 North Wall	<50.0	05/12/21	05/18/21	4116 3
Sample #4 South Wall	<50.0	05/12/21	05/18/21	4116 4
Sample #5 East Wall	<50.0	05/12/21	05/18/21	4116 5
Sample #6 West Wall	<50.0	05/12/21	05/18/21	4116 6
Sample #7 Floor	<50.0	05/12/21	05/20/21	4116 7

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	TPH-ORO (C28-C36)	Method:	EPA8015

Sample Name	TPH-ORO mg/kg	Date Sampled	Date Analyzed	Lab ID
Sample #1 Background - 2 Feet	<50.0	05/12/21	05/19/21	4116 1
Sample #2 Background - 8 Feet	<50.0	05/12/21	05/19/21	4116 2
Sample #3 North Wall	<50.0	05/12/21	05/19/21	4116 3
Sample #4 South Wall	<50.0	05/12/21	05/19/21	4116 4
Sample #5 East Wall	<50.0	05/12/21	05/19/21	4116 5
Sample #6 West Wall	<50.0	05/12/21	05/19/21	4116 6
Sample #7 Floor	<50.0	05/12/21	05/19/21	4116 7

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	Electrical Conductivity-Soil pH-Soil	Method:	USDA 60 (3)m EPA9045D/USDA 60

Sample Name	EC (mS/cm) mmhos/cm	pH	Date Sampled	Date Analyzed	Lab ID
Sample #1 Background - 2 Feet	0.952	8.5	05/12/21	05/19/21	4116 1
Sample #2 Background - 8 Feet	0.384	8.1	05/12/21	05/19/21	4116 2
Sample #3 North Wall	0.336	8.2	05/12/21	05/19/21	4116 3
Sample #4 South Wall	1.17	8.9	05/12/21	05/19/21	4116 4
Sample #5 East Wall	0.824	8.6	05/12/21	05/19/21	4116 5
Sample #6 West Wall	0.384	8.3	05/12/21	05/19/21	4116 6
Sample #7 Floor	0.404	8.4	05/12/21	05/19/21	4116 7

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	Sodium Adsorption Ratio	Method:	USDA 60 (20B)m

Sample Name	SAR	Date Sampled	Date Analyzed	Lab ID
Sample #1 Background - 2 Feet	7.02	05/12/21	05/18/21	4116 1
Sample #2 Background - 8 Feet	0.34	05/12/21	05/18/21	4116 2
Sample #3 North Wall	1.91	05/12/21	05/18/21	4116 3
Sample #4 South Wall	11.7	05/12/21	05/18/21	4116 4
Sample #5 East Wall	4.64	05/12/21	05/18/21	4116 5
Sample #6 West Wall	0.48	05/12/21	05/18/21	4116 6
Sample #7 Floor	2.14	05/12/21	05/18/21	4116 7

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	Table 915 Metals	Method:	EPA6010

Sample Name	Ba - Barium	B - Boron	Cd - Cadmium	Cu - Copper	Pb - Lead	Ni - Nickel	Zn - Zinc	Date Sampled	Date Analyzed	Lab ID
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
Sample #1 Background - 2 Feet	39.8	<2.0	<1.0	<1.0	<1.0	1.25	1.92	05/12/21	05/19/21	4116 1
Sample #2 Background - 8 Feet	32.8	<2.0	<1.0	<1.0	<1.0	<1.0	1.11	05/12/21	05/19/21	4116 2
Sample #3 North Wall	57.0	<2.0	<1.0	1.11	1.34	1.57	4.80	05/12/21	05/19/21	4116 3
Sample #4 South Wall	26.4	<2.0	<1.0	<1.0	<1.0	<1.0	2.52	05/12/21	05/19/21	4116 4
Sample #5 East Wall	28.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	05/12/21	05/19/21	4116 5
Sample #6 West Wall	33.8	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	05/12/21	05/19/21	4116 6
Sample #7 Floor	43.6	<2.0	<1.0	<1.0	<1.0	1.03	2.04	05/12/21	05/19/21	4116 7

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	Table 915 Metals	Method:	EPA6010

Sample Name	Se-Selenium mg/kg	Ag-Silver mg/kg	Date Sampled	Date Analyzed	Lab ID
Sample #1 Background - 2 Feet	<5.0	<5.0	05/12/21	05/19/21	4116 1
Sample #2 Background - 8 Feet	<5.0	<5.0	05/12/21	05/19/21	4116 2
Sample #3 North Wall	<5.0	<5.0	05/12/21	05/19/21	4116 3
Sample #4 South Wall	<5.0	<5.0	05/12/21	05/19/21	4116 4
Sample #5 East Wall	<5.0	<5.0	05/12/21	05/19/21	4116 5
Sample #6 West Wall	<5.0	<5.0	05/12/21	05/19/21	4116 6
Sample #7 Floor	<5.0	<5.0	05/12/21	05/19/21	4116 7

Soil

Sample Analysis

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples		
Analysis:	Table 915 - Hexavalent Chromium (Cr VI)	Method:	SM 3500-Cr B

Sample Name	Cr VI- Hex Chromium mg/kg	Date Sampled	Date Analyzed	Lab ID
Sample #1 Background - 2 Feet	<0.30	05/12/21	05/18/21	4116 1
Sample #2 Background - 8 Feet	<0.30	05/12/21	05/18/21	4116 2
Sample #3 North Wall	<0.30	05/12/21	05/18/21	4116 3
Sample #4 South Wall	<0.30	05/12/21	05/18/21	4116 4
Sample #5 East Wall	<0.30	05/12/21	05/18/21	4116 5
Sample #6 West Wall	<0.30	05/12/21	05/18/21	4116 6
Sample #7 Floor	<0.30	05/12/21	05/18/21	4116 7

eANALYTICS LABORATORY

		Sample Name:	Sample #1 Background - 2 Feet
Client:	Aspen Environmental Field Services		
		Lab ID:	4116 1
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	63	2-Fluorobiphenyl	85
p-Terphenyl-d14	100		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Sample Analysis

eANALYTICS LABORATORY

		Sample Name:	Sample #2 Background - 8 Feet
Client:	Aspen Environmental Field Services	Lab ID:	4116 2
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	62	2-Fluorobiphenyl	87
p-Terphenyl-d14	93		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Sample Analysis

eANALYTICS LABORATORY

		Sample Name:	Sample #3 North Wall
Client:	Aspen Environmental Field Services		
		Lab ID:	4116 3
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	55	2-Fluorobiphenyl	82
p-Terphenyl-d14	88		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Sample Analysis

eANALYTICS LABORATORY

		Sample Name:	Sample #4 South Wall
Client:	Aspen Environmental Field Services		
		Lab ID:	4116 4
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	54	2-Fluorobiphenyl	85
p-Terphenyl-d14	87		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Sample Analysis

eANALYTICS LABORATORY

		Sample Name:	Sample #5 East Wall
Client:	Aspen Environmental Field Services		
		Lab ID:	4116 5
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	55	2-Fluorobiphenyl	85
p-Terphenyl-d14	101		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Sample Analysis

eANALYTICS LABORATORY

		Sample Name:	Sample #6 West Wall
Client:	Aspen Environmental Field Services		
		Lab ID:	4116 6
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	44	2-Fluorobiphenyl	79
p-Terphenyl-d14	82		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Sample Analysis

eANALYTICS LABORATORY

		Sample Name:	Sample #7 Floor
Client:	Aspen Environmental Field Services		
		Lab ID:	4116 7
Project:	Summit Midstream / A-18E Soil Samples	Date Sampled:	5/12/2021
		Date Extracted:	5/20/2021
		Date Analyzed:	5/21/2021
Analysis:	PAHs (Polynuclear Aromatic Hydrocarbons)	Method:	EPA8270 (SIM)

Surrogate Recoveries

Surrogate	% Recovery	Surrogate	% Recovery
Nitrobenzene-d5	88	2-Fluorobiphenyl	76
p-Terphenyl-d14	71		

Compound	Result (mg/kg)
1-Methylnaphthalene	<1.5
2-Methylnaphthalene	<1.5
Acenaphthene	<1.5
Anthracene	<1.5
Benzo(a)-anthracene	<1.0
Benzo(a)-pyrene	<0.11
Benzo(b)-fluoranthene	<1.0
Benzo(k)-fluoranthene	<1.5
Chrysene	<1.5
Dibenzo(a,h)-anthracene	<0.10
Fluoranthene	<1.5
Fluorene	<1.5
Indeno(1,2,3-C,D)-pyrene	<1.0
Pyrene	<1.5
Naphthalene	<1.0

Soil

Quality Control - Surrogate Recoveries

eANALYTICS LABORATORY

Client:	Aspen Environmental Field Services	Lab ID:	4116
Project:	Summit Midstream / A-18E Soil Samples	Method:	EPA8260

Sample Name	Dibromo-fluoromethane % Recovery	1,2 Dichloro-ethane-D4 % Recovery	Toluene-D8 % Recovery	4-Bromo-fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID	
Sample #1 Background - 2 Feet	98	97	98	73	05/12/21	05/18/21	4116	1
Sample #2 Background - 8 Feet	99	94	107	74	05/12/21	05/18/21	4116	2
Sample #3 North Wall	102	104	104	77	05/12/21	05/18/21	4116	3
Sample #4 South Wall	105	101	107	80	05/12/21	05/18/21	4116	4
Sample #5 East Wall	105	103	114	85	05/12/21	05/18/21	4116	5
Sample #6 West Wall	102	96	103	89	05/12/21	05/18/21	4116	6
Sample #7 Floor	107	97	111	80	05/12/21	05/18/21	4116	7

eANALYTICS LABORATORY

Client: Aspen Environmental Field Services Lab ID: 4116

Project: Summit Midstream / A-18E Soil Samples

Soil		Benzene	Toluene	Ethyl-Benzene	Total Xylenes	TPH-TVPH	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	QC Start Date
Method Blank		<0.050	<0.050	<0.050	<0.050	<50.0	<0.050	<0.050	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Lab Control Sample	70%-130%	110	102	98	88	93	85	86	05/18/21

Soil		TPH-TEPH	QC Start Date
Method Blank		<50.0	
		mg/kg	
Lab Control Sample	70%-130%	94	05/18/21
		83	05/20/21

Soil		TPH-ORO	QC Start Date
Method Blank		<50.0	
		mg/kg	
Lab Control Sample	70%-130%	102	05/19/21